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SECRETS OF GENERATION:

COMPRISING THE ART OF

PROCREATING THE SEXES AT WILL,

Of Begetting Sound and Vigorous Infants, &c. &c.

WITH DIRECTIONS FOR

SELF-MANAGEMENT

IN SEXUAL AND VENEREAL DISEASES.

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PREFACE.

The very favorable reception of two editions of this work, in a short time, has induced its author to revise, enlarge, and, he hopes, improve, the present impression.

The subject considered, is one of universal interest, and was investigated from the most remote period of antiquity to the present time; but most particularly from the origin of medicine, as an art or science. Considered in all its relations, religious, moral, social, legal, physical, philosophical, and medical, it will be found of the greatest importance to mankind. This will be manifest to all on the perusal of the introductory remarks, and the succeeding pages.

A philosophical, social, physical, and medical history of the reproductive function of the Vegetable and Animal Kingdoms, and of the abuses and disorders resulting from it in the latter, will, it is hoped, prove instructive and interesting to the majority of general, as well as medical, readers.

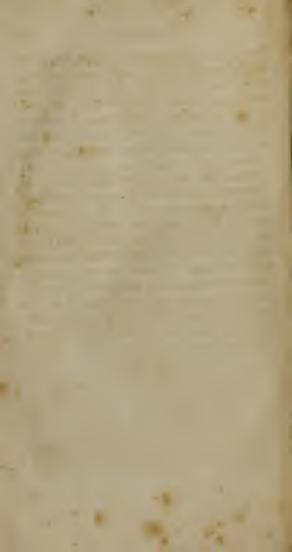
The function of reproduction has been examined and inquired into, by the most virtuous theologians, moralists, naturalists, philosophers, physiologists, legislators, and jurisconsults, as the most influential of all the functions of human economy, on every class of society, both civilised and savage. It must be almost superfluous to observe that it is the duty of every lecturer on physiology, on obstetric and on legal medicine, to describe it according to the ancient and modern conclusions; because it materially influences population, morals, public health, disease, mortality; as well as personal reputation, property, legitimacy, and even life, together with a vast number of other questions, hereafter enumerated.

The illustrious and indefatigable Haller propounded the axiom before describing the physiology of generation:—"There are no secrets in physiology;" and our immortal Harvey and Hunters, and all their eminent successors, were of the same opinion.

Moral and legal authors in all ages adopted it.

On a recent and memorable occasion, that astute and enlightened judge, Lord Denman, declared, in his judicial capacity, that the subject was most important when described and expounded by medical authority. This is also the opinion of every rational individual, who has arrived at the adult age, unless the mock-modest and pharisaical.

These facts are mentioned, to reconcile the prudish and the ignorant to the consideration of a subject, highly conducive to the preservation of the health of parents and offspring, to the improvement of morals and population, and to the correction of numerous evils inflicted on society in all countries. Whether the author has succeeded in the task he has undertaken, after several years' research and study, remains for the public to determine; but of this he is convinced, that his motives and endeavors are well intended, and solely guided by the mens conscia recti.



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SECRETS OF GENERATION, &c.

CHAPTER I.

ANCIENT AND MODERN THEORIES OF HUMAN GENERATION—OPINION OF PLATO, AND OTHERS—CURIOUS SUPPOSITIONS—EXPERIMENTS RECEIVED—OPINION OF MODERN PHYSIOLOGISTS.

The animation of the first of the human species presents a question of physiology, full of interest, on which men of the greatest genius have commented, though they have completely failed to solve it. The continuation and reproduction of our species have also occupied the reflections and investigations of the greatest philosophers and physiologists of modern times, some of whom have proposed hypotheses and theories replete with the grossest absurdities and errors. These hypotheses are about two hundred and fifty in number, and a brief notice of those which were best received, may not be uninteresting to the modern physiologist as well as general reader.

Plato thought that the reproduction of man, as well as of almost all organised beings, was effected by spectres and images extracted from the creative Divinity, which, by a harmonic movement, were arranged in certain numbers into perfect order. It was in the unity of the number three, that this great philosopher made the essence of all generation to consist. That which engendered, or the father, formed the first number; the being in which the conception was effected, the second number; and that which resulted, the offspring, the third number.

The opinion of Plato was, that all generation emanated from the Divinity himself, who, by a perpetual course of miracles, maintains and renews the living world; and, consequently, that man is, in the phenomena of reproduction, but an instrument of the consummate wisdom of power which govern the universe; and secondly, that generation can only be effected by a male who furnishes certain principles to a female, in whose womb the result or new being, is developed; and that this law equally governs the whole of the animal and vegetable kingdoms. This tripartite harmony was considered an image of that mysterious power, the Trinity in Unity, which created and perpetuates all organised beings.

Pythagoras supposed that a vapour descended from the brain and nerves during coition, and formed the embryo, which developed according

to the laws of harmony.

Epicurus held that perpetuation of man was

effected by a mixture of the fluids of both sexes, which were united in the sexual organs of the female, animated, developed, and changed into a being resembling those who furnished them.

Lucretius and a great number of ancient physiologists admitted this doctrine. That great poet considered that there was a mixture of fluids, and that the most vigorous determined the sex, which is now the general opinion. His words are:—

Et commiscendo, cum semen forte virile Fœmina commulsit subita vi corripuitque,

Temper enimpartus duplice de semine constat. Atque utrique simile est magis id quodcunque creatur. De Natura Rerum, 1. iv.

He explained the resemblance of infants to their parents in the following manner:—he thought that which ever parent furnished the most elaborated and abundant seminal fluid, would impress the lineaments and form on the offspring—that the most vigorous parent who would possess most genital power, would determine the sex and physical characters of the infant, and, consequently, that the offspring would most resemble this parent, both in mind and body. But if the father and mother possessed equal power, the infant would resemble both.

Hippocrates and a vast number of his successors, as well as all modern physiologists, admit

this doctrine.

Hippocrates, Pythagoras, Democritus, Aristotle, Anaxagoras, Alemeon, Parmenides, Em-

pedocles, Epicurus, Galen, Avicenna, Zacutus, Lusitanus, Decartes, Venette, Rousel, and Buffon, acknowledged the existence of a fecundating sperm in woman; while Zeno, the Stoics, Hippon, and Fallopius, with many other celebrated anatomists, denied it. It is important to observe in passing, that the mucous fluid which is generally, but not always, effused by the uterus and vagina, during copulation, is not seminal or prolific, nor does it contribute to the formation of the new being. It is furnished by the lacunæ and glands of the vagina and neck of the womb, and by the lining or mucous membrane of these organs, and the Fallopian or uterine tubes. This fluid may be more or less abundant; and according to Magendie and others, is not effused by some individuals, and by others only very sparingly. Moreover, it does not occur during the greatest excitement, which is during and immediately after the male emission.

Galen related the case of a hysterical woman, who on the slightest excitement of the genitals had a mucous evacuation, accompanied by voluptuousness, and this also happened during sleep. Sauvage mentions the case of a young girl of the most rigid chastity, who suffered from abundant vaginal discharges, even at the foot of a decrepid and disgusting confessor. (T. iii. p. 227.) Her disease was leucorrhea or whites. Loyer-Villermay describes a similar occurrence at the access of hysteria. Such evacuations may also be induced by an excited imagination, by relaxation of the mucous membrane of the vagina, as

in leucorrhæa or vaginal debility, and they may also occur in those who are sterile from diseases of the womb or ovaries; so that they cannot be

considered seminal or prolific.

The prolific fluid is supplied by a small vesicle or egg in the ovary, and is too trifling to be appreciated during coition, and scarcely even in the ovary on inspection after death. The ancient anatomists were therefore right, when they termed the ovaries, testes muliebres—the organs which secreted the seed in woman, as the testicles do in man. This fact is also attested by Divine authority. "I will place an irreconcilable bar between the seed of a woman and

the seed of the serpent."

Hippocrates, who was unacquainted with human anatomy, supposed that the spermatic fluid of man was furnished by all parts of the body, and especially by the brain, as the principles of generation formed a new being, a miniature of our entire organization. As to the opinion that the spermatic fluid was formed by the brain, that it descended along the spine to the loins and sexual organs, it is decidedly erroneous, for when the testicles which secrete it are removed, there is no seminal secretion. It is a remarkable fact, that the organ of love is now placed in the cerebellum by the followers of Gall and Spurzheim. The father of physic also entertained the opinion of Lucretius, that the resemblance of infants to either parent depended on a greater or less quantity of seed furnished by either. He held that a male resulted from a mixture of both seeds

equally hot and elaborated; whilst a female was produced when the father or mother supplied a weak fluid, or one which is suddenly secreted. He supposed that on the mixture of both sexes, the new being was formed in the womb. That this mixture absorbed heat, and passed from a state of fluidity to a certain consistence. Acted on by continued heat and vitality, the germ or new being, evolved a vapour which formed a round pellicle that enveloped it, and that it always received a new principle of life from the author.

This pellicle or fine membrane formed an entire covering of the body, which finally was the skin, gave out a vapour which was condensed, and formed another membrane, and this part condensed a vapour into a fluid by which the embryo was surrounded. In fine, he held that one point of this sac attached itself to the womb by a spongy, vascular union, through which nutrition was derived and carried to the navel of the fœtus by means of the umbilical cord or

navel-string.

It will appear hereafter, that this view of human ovology, though promulgated more than three centuries before the Christian era, does not differ essentially, as regards the connexion between the embryo and mother, though otherwise erroneous, from that of the latest writers on embryology.

Aristotle admitted the female ejaculation, but denied that it contributed to the new being, in which he was right; that the male alone furnished the principles, while the female supplied the necessary materials for their development, and these he considered, with Hippocrates, resided in the menstrual fluid. This was an error. The menstrual fluid is a natural secretion, the result of a periodical determination of blood to the womb, which prepares it for conception, and when this happens, the fœtus is nourished by blood. He said that woman furnished the marble, man was the sculptor, and the embryo the statue. (De Generat. Animal.)

Averrhoes, Avicenna, and many others adopted this doctrine; but the greatest number

embraced the system of Hippocrates.

Galen held that the embryo was produced by the seed of man, and that the materials afforded by woman nourished it. Diogenes, Hippon, and the Stoics, concluded that the embryo was produced by the male seed alone, and that the mother only served for its development, as the earth does for the germination of grain.

Decartes supposed that the mixture of the two seeds produced a fermentation, in which the embryo was formed; while Pascal and other chemists held that the spermatic fluid of man was acid, and that of woman alkaline. (De For-

matione Fœtus.)

Viussens maintained that both seeds contained spirits; and Van Helmont held that the female furnished seminal fluid, and the male a spirit or vital principle.

Maupertius was of opinion that each seed con-

tained an imperfect animal, or parts of an ani-

mal, which it finally resembled.

Empedocles had previously supposed, with Aristotle, that the embryo existed in separate parts, in the seeds of both sexes, which, on being united, formed a regular order and a perfect whole. (Delamethria. Inst. Boerhaave.)

Harvey concluded, after innumerable experiments, that the germ was in the ovary in animals and plants; and was the first who maintained the doctrine now universally admitted as correct—Omnia ex ovo. He supposed impregnation was effected by a kind of magnetic influ-

ence.

De Graafe contended that all animals were produced from an egg, maintaining the opinion omnia ex ovo, that germs existed in the ovary in the form of small transparent vesicles or ovules. (De Mulier. Organis, &c. 1677.) This doctrine was also admitted by Steno, Van Horn, Swammerdam, Malphigi, Harvey, Valisnieri, Plouquet, and many other celebrated physiologists, and is

now generally received.

The next hypothesis was proposed by Hamme, and advocated by Hartsoecker, Leuwenhoeck, Boerhaave, Keil, Cheyne, Geoffroi, Cardinal de Polignac, Lieutaud, and a host of others, who maintained, that the germ existed in the seminal fluid of man, in the form of small living worms, which they called animalcules; that one drop of sperm contained millions of them; that projected into the cavity of the uterus during coition, one or more of them ascended into the

uterine tube, arrived at the ovary, entered a vesicle, caused impregnation, and returned into the womb under the form of a small ovum or egg; and finally developed into an embryo. MM. Prevost and Dumas also maintain this doctrine in their recent work. They allege that in a vast number of artificial fecundations, they never effected vivification when the animalcules were killed or destroyed. Spallanzani stated that he mixed three grains of the spermatic fluid of a frog with seventeen ounces of water, immersed the point of a fine needle in this fluid, and having applied it to the spawn of the female, caused impregnation. According to Pritchard's Microscopic Researches, 1834, a drop of fluid contains myriads of animalcules of different forms, which corroborates the former opinion. M. Raspail contends that the animalcules are organic remains, or the product of the decomposition of the sperm. M. Virey regards them as bladders distended by a sort of pollen, which burst when they arrive at the organs of the other sex.

The objections against this doctrine are, the hybrid productions; as the mule, procreated by different animals; the procreations between the stallion and the ass, and the ass and the mare; and the error in supposing that only one of many million animalcules would be vivified and the rest destroyed. This would be contrary to the wisdom of the Author of nature. Nevertheless, it has been lately supposed by an anti-population American, that a woman who wishes to

prevent conception, should inject the vagina immediately after coition, to destroy the animalcules. This recommendation displays great ignorance and still greater depravity; and it is

as ineffectual as it is impracticable.

Vallisnieri supposed that man commenced his existence as a worm, which developed itself by degrees, as an insect metamorphoses itself.—This hypothesis was also entertained by Bourguet, Woodward, Lyonnet Rai, Schelhammer, Paitoni, Launai, Duverney, Schlichting, Ploucquet, Hamberger, Senac, &c., and even Linnæus and Buffon seemed inclined to adopt it. But Spallanzani has shown the falsity of this hypotheses by fecundating the ova or eggs of a

frog without these spermatic worms.

The succeeding hypothesis was designated epigenesis, or the partial and successive formation of the fœtus, a system maintained by Aristotle and Galen, revived by Decartes, Harvey, Needham, Muller, &c. This was called essential power (vis essentialis) by Wolf, nisus formativus by Blumenbach, and plastic form by Cudworth, and is analagous to the attraction of parts and superstructure of organs proposed by Maupertuis. (Venus Physique, 1745.) Buffon almost revived this hypothesis. He held that during the most vivid enjoyment a number of organic molecules was separated from every part of the bodies of both sexes, that they resembled the parts which supplied them, that when they arrived in the womb they approached each other and united; but that those supplied by the eye, the nose, the heart, &c. of man, could only unite with those supplied by the same organs in woman. Every one acquainted with anatomy knows, that there is no passage for such parts to the womb, and that this supposition is ima-

ginary.

Bonnet, Spallanzani, and the Italian schools, maintained that the germs pre-existed and were created since the beginning of the world, and were successively transmitted through innumerable individuals. According to this doctrine, Eve, the mother of mankind, possessed all the germs of men born, and to be born on the face of the earth; and every species of animals and plants must possess the same power. Such is the system of evolution. MM. Virey and Velpeau object to this theory, on the grounds of the infinite divisions of matter, that a grain of corn might reproduce until it covered the earth; and the latter concludes that the ovary secretes the germ, (Traite Elementaire de l'Art des Accouchemens, &c., 1829), which is now the generally received opinion.

Sthal considered that the soul had the power of creating and organizing the fœtus; and Van Helmont admitted a formative spirit, a seminal being in the womb; and of the same genus of spirits as his Archæus in the stomach; both authors attributed marks and deformities to mental emotions. According to these authorities, the sperm is a living fluid, which transmits the soul and the moral and physical qualities of the

father to the fœtus.

The ancients were of opinion, that the ovaries in women were analogous to the testicles in man, and supplied a seminal fluid proper for reproduction. This opinion prevailed until the time of Steno, a Danish anatomist, who first maintained that the vesicles in the ovary contained a liquid resembling that in the eggs of birds, were ova or eggs, which contained the design and lineaments of the embryo, which after having been fecundated by the seed of the male, swelled, burst, escaped into the uterine (Fallopian) tube, fell into the uterus, there to undergo all the development of which the new being was ca-

pable.

The experiments of Fabricus ab Aquapendente, on the eggs of pullets, those of Harvey on bitches, sheep, and deer, already described, confirmed the opinion, and left no doubt that viviparous animals were produced from an egg like oviparous. De Graafe, Malphigi, Haller, Bonnet, and Spallanzani, after an immense number of experiments, confirmed the opinion of the pre-existence of germs in the ovaries. They concluded that the fecundation of the germ takes place in the ovary, and that the development of the product of fecundation is a simple evolution, and not an epigenesis, as formerly supposed. Harvey was the first who maintained that an ovum, egg, or vesicle, dropped from the ovary after impregnation, and De Graafe subsequently proved this fact by precise experiments. Dumas and Prevost have lately confirmed it by recent experiments. Brissiere saw this egg

or ovule partly in the interior of the uterine tube, whilst it still adhered to the ovary. This is the received opinion of all modern physiologists.

CHAPTER II.

GENERATION—PROCREATION OF THE GERMS—
THE ACT OF COPULATION—THE FALLOPIAN
TUBE—PROWESS OF FECUNDATION.

The mysterious function of reproduction is still involved in obscurity. The transmission of life by parents in the animal and vegetable kingdoms remains as incomprehensible as ever.

Fecundation is effected differently, in different animated beings. We have already observed that the generation in animals, insects, fishes, reptiles, birds, and vegetables, occurs from the existence of a germ or ovum, and hence the truth of the ancient axiom, omnia ex ovo—all generation is from an egg.

A question has been discussed, but not as yet satisfactorily determined, what is the seat of generation in the human subject; is it in the womb, is it in the oviduct or uterine tube, or is it in

the ovary?

Almost all the ancients believed that the germs of the male and female came into contact in the womb, and formed the new being. Dr. Blundell, and many recent physiologists, suppose there is an electrical, or galvanic, or magnetic influence which effects generation.

"Has galvanism or electricity any share in the consideration of the Great Designer? Time, the discoverer of truth, may perhaps solve this important question!" This was previously advanced in the French Encyclopædia, Art. Generation. The great majority of modern physiologists entertain the opinion that fecundation is effected in the ovary. Prevost and Dumas adopt the idea of Buffon, Maupertuis, Aristotle, and Hippocrates, that the cavity of the womb is the seat of fecundation. Dr. Blundell concludes that the rudiments (ovum) and fecundating fluid meet in the uterus. This is contrary to the received opinion; and would not account for tubal, ovarian, and extra-uterine, or abdominal pregnancies. He admits "that the secretions of our sex reach to the ovaries, that there can be no full formation of the fœtus without the mixture of the two substances (male and female.) And it is clear that in ovarian pregnancy such deep penetration must occur. Perhaps theoveraction of the genitals and the conveyance of the semen too far, may be the exciting cause on which extra-uterine pregnancy depends." cannot assent to the last notion, for were it true, extra-uterine pregnancy would be of common and not of rare occurrence; and I agree with those who ascribe it to relaxation of the uterine tube, after impregnation in the ovary. over, conception has followed the slightest possible penetration within the labia externa, even when the penis was not more than half an inch in length after amputation.

In support of this hypothesis, some allege that in all their experiments, they never found the animalcules in the uterine tubes or ovaries, that they found them in the cavity of the womb, that ovules must be imbedded in mucus which is supplied by the tube while conveying the ovum to the uterus; that they never could artificially fecundate ovules taken directly from the ovary, though nothing was more easily done on those which had passed into the womb.

In refutation of this conclusion, it is only necessary to state, that Ruysch asserted, that he found the spermatic fluid in the uterine tube of a young woman who was caught in the act of adultery by her husband, and stabbed to death; and Haller discovered the fluid in the tubes of sheep after having been slaughtered. This was probably the mucous fluid supplied by the lining membrane of the uterus and uterine tubes. Recent cases of semen being found in the cavity of the womb, are open to the same objection.

M. Velpeau well observes, in commenting on the preceding statements, that it does not follow, because the ova of a frog could not be impregnated unless enveloped in mucus, the same thing happens to women. It was not to be expected that the removal of an ovum with an instrument could be effected without such violence as would injure it and unfit it for impregnation. We must also bear in mind the existence of ovarian, tubal, and extra-uterine pregnancies which clearly prove that fecundation occurs in the ovary and not in the uterus. Mr. Stanley recorded a

case of ovarian pregnancy (Med. Trans. vol. vi.) and Dr. Granville another, in which the fœtus was four months old. (Phil. Trans. 1820.) M. Brissiere relates a case in which one half of the embryo was in the ovary and the other in the uterine tube. Others attest the development of the fœtus in the ovary, tube, and abdomen, among whom are Verheyen, Cyprianus, Saint Maurice, Courtial, Littre, Haller, &c. Every woman and every female of the mammiferæ is barren, if deprived of both ovaries, or when these are completely disorganised, or when the tubes are impervious or ligatures applied to

them before impregnation.

The experiments of Nuck, Haighton, and Blundell, afford the most conclusive evidence in support of the opinion, that fecundation occurs in the ovary. Nuck applied a ligature round the tube between the womb and the ovary, immediately after copulation; he killed the animal a few days afterwards and found the ovum arrested by the thread. Dr. Haighton tied and also divided the tube in rabbits, and invariably observed that no fecundation occurred in the ovary on the side on which he operated (Phil. Trans. vol. lxxxvii). Dr. Blundell's experiments are described in the Medico Chirurgical Transactions, in his work on Generation, and also in the edition of his Obstetricy, by Dr. Castle. He divided the uterus of a rabbit, so as to obliterate its cavity; and he also obliterated the upper part of the vagina. The animal recovered, and was subjected to the male, but no fecundation

took place, though there was an attempt at it, for corpora lutea were developed, and a quantity of water found in the uterus! His experiments were numerous: and led him to the conclusion that the germs of male and female rabbits, and perhaps of all other animals, must come in contact to effect impregnation. these experiments he infers, that corpora lutea may form in rabbits independently of the full excitement of the genitals—that the mere absorption of the semen from the vagina by means of the lymphatics is insufficient for the purposes of formation. In one vaginal experiment, the access of the semen to the ovaries being interrupted, impregnation was not accomplished, though the animal admitted the male as many as fifty times, mostly at intervals of two or three days or more—a quantity of water was found in the uterus, as in the other experiments. In this case, the male fluid must have been frequently absorbed from the vagina.

The theories of generation now maintained, are three:—1. The transmission of the spermatic fluid of the male through the uterus, uterine tube, or oviduct to the ovary, a vesicle, ovum, or egg of which is vivified and passes into the womb to be developed, until the expiration of the ninth month, when it is born and becomes an independent being. 2. The transmission of a subtile vapour or effluvium from the male semen (aura seminalis) through the same parts to the ovary, the impregnated ovum passing into the uterus to be developed in the manner be-

fore stated. 3. The absorption of the seminal fluid of the male from the surface of the vagina.

The transmission of the spermatic fluid through the uterus, uterine, tube, or oviduct to the ovary, a vesicle, ovum, or egg, is vivified or fecundated, and passes into the womb to be developed until the expiration of the ninth month or fortieth week, when it is born, and becomes an independent being. This is the general

opinion.

During the act of copulation, the external and internal genital organs of both sexes, which are all supplied by nerves from the same source, are excited and stimulated, the vagina closes tightly on the penis, the uterine orifice is in close contact with the orifice of the male urethra, the tube or oviduct becomes straightened and erected, and its loose or floating extremity (corpus fimbriatum) seizes on the ovary, and allows the male fluid after its injection into the cavity of the womb, to advance through the tube to the ovary, by a species of vital attraction or suction. The moment the spermatic fluid arrives at the ovary, which is seized by the extremity of the uterine tube, it acts on and vivifies one or more ova or ovules, and forms the new being, or beings.

The fecundated ovule is now the seat of a new vitality, it becomes swollen, reddish, and finally bursts its membrane, and detaches itself from the ovary. The fimbriated extremity of the uterine or Fallopian tube is still in contact with the ovary, and favours the passage of the

newly formed being, the embryo, into the uterus to be developed until the expiration of the ninth month, by a series of the most extraordinary changes. When the extremity of the tube lo-ses its hold of the ovary, which may happen according to some writers, from excessive voluptuousness, fear, &c; the ovule on bursting its covering will fall into the abdomen, there develope itself as an extra-uterine pregnancy, and finally destroy the patient unless relieved by gastrotomy or the first part of the Cæsarean operation. It is, however, a fortunate circumstance that abdominal and tubal pregnancies are of very rare occurrence. A case of this kind was successfully treated in London, 1836.

Almost all physiologists are of opinion that the uterus possesses a power of suction, and imbibes the semen after its ejaculation or a vapour arising from it. Ruysh, Haller, Lewenhoeck, Hunter, and others discriminated the spermatic fluid of the male in the uterus; a fact which is denied by others, as cases are on record in which the orifice of the womb was permanently fixed external to the genital aperture, through which fecundation happened. Dr. Ashwell and Mr. Kingdon mentioned cases of this kind at the Medical Society of London a few years since.

I have also seen cases of this description.

The Fallopian tube is said to become erected during the orgasm of coition, to embrace the ovary, which embracement was observed in different animals killed after coition, by Haller, De Graafe, and Cruikshank; in women, who

died soon after coition, by Littre; and in a virgin, who died of hysteria, by Vallisnieri. The peristaltic and antiperistaltic motion of the tube, the conveyance of the semen to the ovary, and the re-conveyance of the impregnated ovum to the womb, have been proved by occular demonstration, by Beclard, De Graafe, Provost and Dumas, and by the experiments of Nuck and Duverney, who arrested the impregnated ovum in the tube, by a ligature applied three days after coition; again by the tubular and abdominal pregnancy, in which the tube has allowed an ovule to escape (Lallemand). It is probable that the increased dilatation of the tube, after fecundation, is intended for the retention of the ovum for some time. How can we explain the fact, that but one tube only is concerned in conception? What was the object of nature, in forming two tubes, two ovaries, two testes, two seminal receptacles, if one organ in each sex be sufficient for the propogation of the species? Or are the double organs in each sex intended for the formation of the distinct sexes?

The same orgasm that affects the ovary and tube is said to render the womb vascular, and lightly congested (Harvey, Ruysh, Hunter and others). Its internal surface, thus irritated, secretes the albuminous concretion, called dicidua, which becomes a membrane according to Hunter, and epichorion according to Chaussier. These effects are purely sympathetic, because they exist in extra-uterine pregnancies; they are more perfect, however, when produced by

the presence of the ovule.

CHAPTER III.

CHANGES AFTER CONCEPTION—EXPERIMENTS BY HARVEY—IMPREGNATION WHERE THE HYMEN IS PERFECT—MOST REMARKABLE CASES—CASE OF COPULATION DURING INEBRIETY ON THE WOMAN'S PART—STRANGE RESULT—CURIOUS INSTANCES OF IMPREGNATION.

The volume, form, and direction of the uterus are gradually changed after conception; its parietes are enormously thickened; its weight, at the completion of the term of gestation, is two or three pounds, and compared with that of a woman who has been a mother (two ounces), and with that of a virgin (half an ounce), we find it multiplied by nearly twelve and twenty-four. Its fibres are muscular (Lobstein); but not invariably so, as attested by Dr. Malins and myself, in a case we published (London Medical and Surgical Journal, January, 1831, vol. vi.)

The opening through which the ovum or germ escapes becomes cicatrized, and is called corpus luteum; it is described by Fallopius, Malpighi, De Graafe, and Ræderer; and its development is not the effect of the male semen, but is a peculiar function of the ovary; it is an indispen-

sable consequence of conception; though some assert that it has been found in women who had not conceived, by Ræderer, and in virgins by Haighton, Vallisnieri, Santorini, Bertrandi, Sir E. Home, Brugnone, and Cruikshank; in mules, by Brugnone, and in animals whose Fallopian tubes were tied before coition, by Haighton.—Dr. Montgomery has lately proved, that the true corpus luteum is never found unless after conception. The male semen is said to be carried by absorption, or by a peristaltic motion of the womb and tubes (Galen, Fallopius, Morgagni, Hunter, Magendie, Richerand, Blumenbach, and Ruysch).

The transmission of a subtile vapour or effluvium from the male semen (aura seminalis) through the womb, one of its tubes, to the ovary which impregnates an ovum, egg, or vesicle, which passes through the tube into the womb and is there developed, is a disputed theory.

The illustrious Ĥarvey made a vast number of dissections of hinds after copulation, and never discovered the male fluid in the womb; hence the opinion was confirmed, that a vapour arose from it—aura seminalis—which passed through the womb and tube to the ovary, one of whose ova or vesicles it impregnated; and that the ovule was conveyed through the tube into the womb to be nourished.

In support of this theory it is urged that impregnation has happened though the hymen was perfect, and closed up the orifice of the vagina, except at the upper part, when no penetration

of the male, further than between the external labia, took place. There are many cases of this kind on record; and a most remarkable one was lately described by Dr. Kennedy, of Dublin: I have also been consulted in similar examples. The penis does not enter the orifice of the womb, which is not much larger, in the unimpregnated state than that of the male urethra. I have known several instances in which the application of the male fluid between the external labia caused impregnation; a fact also attested by Dr. Blundell in his lectures in the Lancet: "I know three cases in which the male organ was not suffered to enter the vagina at all, and where, nevertheless, I suppose, from the mere deposition of the semen, upon the labia, impregnation took place. I have known women astonished to find themselves pregnant, being persuaded that impregnation was impossible, until, to their sorrow, the unwelcome truth was unfolded. In a word, from several facts of this kind, too delicate for a fuller disclosure, I am satisfied that very small quantities of the semen introduced into the lower part of the vagina, where there is an aptitude to become pregnant, will give rise to the new structure." (Principles and Practice of Obstetricy, &c. 1834). I have also recorded cases of imperfect penetration and prolific connexions, when the penis was so destroyed by disease that it was no more than half an inch in length.

I have been confidently assured by a gentleman of veracity, that he impregnated a woman

although he barely penetrated the vagina; his paramour consulted me, perfectly unconscious of what had happened, for she was inebriated at the time, and she most positively denied, when I stated she was pregnant, that it was possible. as she had never known man. My opinion was, however, unaltered, and I advised her to consult other obstetricians as to her condition. Several eminent obstetricians told her she was not pregnant; she called on me again and again, and every time, the womb was more developed, and at last she felt the motion of the fœtus. Her paramour at length made the above confession: she recollected the circumstance of their having been together, and of his having induced her to take too much wine; and at the end of the ninth month, I delivered her of a healthful full-grown infant. Her case attests a fact I have stated in my work on Medical Jurisprudence,—that a healthful woman may be impregnated unconsciously, during inebriation, narcotism, catalepsy, and profound sleep. I have also known cases in which the greater part of the penis was destroyed by disease, or amputated close to the pubis, and yet persons so mutilated continued to propagate. In such cases, there can be but very imperfect penetration, but it is to be remembered that the expulsive power of the ejaculatory muscles of the penis remains in its natural condition. These and similar cases prove that perfect or deep penetration is not necessary for procreation, and they also favour the third theory of absorption of the semen from the vagina.

These cases show that it is not necessary that the male semen should be injected into the womb. Dr. Blundell supposes that, when there is a deposition on the vulva, generation depends on the admixture of the male fluid with the secretions of the female: "for dilution does not destroy the fecundating power. If a glass of a certain height were filled with water, should sugar be thrown into the bottom of it, this on solution, might soon be perceived in the upper part of the fluid, especially if agitation occurred; so the fecundating secretion may, by admixture, have penetrated to the inmost recesses of the genitals, more especially if the secretion of the genital surface be copious." He goes on to observe, that children are sometimes not procreated for want of sufficient penetrative power in the male organ, which I very much question for the reasons just stated. He alludes to the experiments of Spallanzani, who found that three grains of the semen of a frog dissolved in two pints of water, were sufficient to give it a fecundating power: even that small quantity taken upon the point of a fine needle; from which Dr. Blundell infers, "if the female genitals be apt for conception, the requisite quantity of the male material is small," p. 67.

In reviewing Dr. Blundell's opinions, I am bound by the many facts I have adduced in this chapter, to observe, that they are, in my opinion, liable to many unanswerable objections. The results of repeated consultations enable me to state, that a complete emission of the male fluid

at the interval of twenty-four hours, will rarely, if ever, cause impregnation: nor do I comprehend the possibility of the germ or ovarian fluid passing into the womb to mix with the spermatic fluid of the male; and, therefore, the requisite quantity of the male material for impregnation is not so small as is above supposed. Neither can I perceive any analogy between the mixture of sugar and water and the spermatic and ovarian fluids; nor do I believe that children are sometimes not procreated for want of sufficient penetrative power in the male organ. The orifice of the uterus is generally within two inches or two inches and a half of the external genital aperture, though it may be more distant, or be elevated under certain circumstances, and the slightest penetration, in the opinion of all physiologists, when the semen is elaborate, is sufficient for impregnation.

Lastly, it is to be recollected that the conclusions of Spallanzani refer to frogs, and not to human species, and therefore it does not follow that such extreme dilution, as in the former cases, can ever happen in the latter, though there is generally, but not always, some dilution of the male fluid. If this were the fact, the male material would be always prolific; but this is not the case, unless it has remained in the seminal receptacles for some hours, as observed by Harvey and others. Many proofs of this fact have

fallen under my own consideration.

The mucus of the seminal receptacles, the orostatic fluid and urethral mucus, dilute the

male fluid, as well as the vaginal and uterino mucus, in most cases during the seminal emission; but this last dilution does not always hap-

pen.

The case mentioned by Mr. Hunter, in which his patient injected semen into the vagina and caused impregnation, appears to me open to serious objection; and I should be very much disposed to think there was a more legitimate cause for the procreation.

On a careful review of all the theories of human generation, we can only arrive at a conclusion admitted by all, that a union of the sexes is necessary, that both should be in good or tolerably good health, and that the function ought only to be performed when dictated by nature.

There is a vast deal of injury done to health and public morals by the excesses and abuses of the reproductive functions, some of which I have slightly alluded to in my works on Midwifery, Jurisprudence, and on the Comparative State of Prostitution, &c. The primitive fathers and physicians have duly noticed the evils to which I allude; and every experienced medical practitioner can prove their frequent occurrence. It is all well for the sentimentalists and the mockmodest to declaim about a notice of them but nature, justice, morality, and the preservation of health, as well as the perpetuation of the human race, demand it. Such, however, is the hypocrisy of the day, that even a notice in a dead language is abused and condemned by ignorant intolerant bigots and fools, who are unable to appreciate the importance of the subject.

CHAPTER IV.

PROCREATION OF THE SEXES AT WILL—AND OF VIGOROUS POPULATION—INSTANCES OF THE SUCCESS OF MILLOT'S SYSTEM FOR REGULATING THE SEX OF INFANTS—VENETTE'S RULES—GENERAL CONCLUSIONS.

Another curious inquiry was attempted by the ancient authors, whether it was impossible to procreate the sexes at will: and this has been long determined in the negative by a pre ponderating majority of physiologists. Every one knows there are some families who are most desirous of male offspring, and others who are anxious for female: and even some who go so far as to expect that the sex of the fœtus in utero may be determined by their medical attendants, midwives, and fortune tellers. A few remarks upon this subject are therefore necessary and allowable.

The ancients supposed that the right testicle and right side of the womb, produced male, and the left, female offspring. (See Plate.) Hippocrates, Aristotle, and Galen, entertained this opinion; which was in time combated by Pare, Diemembroeck, Verhagen, Alberti, Franco, Hoffman, Bartholin, Vesalius, Harvey, and

many others. These writers demonstrated that men who had one testicle produced infants of both sexes; and they also found male feetuses in the left side of the womb, and females in the right; and finally, that the right Fallopian or uterine tube had been destroyed in women who

had begotten both boys and girls.

This exploded opinion of the ancients was, however, lately revived by M. Millot, who has offered the following hypothesis, which, though apparently feasible, is generally considered erroneous:-He states, that he made numerous experiments on human generation, and was well convinced that it is possible to procreate either sex at will. His views are, however, denied by all modern physiologists. He entertained the exploded opinion, that the rudiments of male infants are in the ova of the right ovary, and those of the female in the left ovary. He concludes, upon this mere assumption, that a certain position ought to be assumed during the act of reproduction to produce a boy or girl. "Si inclinetur levitur mulier in coitu in latus dextrum generat mas, in sinistrum fæmina." He mentions the case of a noble lady, who brought forth twins both males, after having followed his advice. Three other countesses obtained the same success by the same method. He proceeds to attest his physiology by the following statements:-

"The virtuous wife of the last Duke of Orleans, having given birth to two boys, consulted me, through the medium of Madame de Blat,

her maid of honour, to inform her of the mode of procreating a daughter instead of another son. I gave the necessary information, and she brought two daughters into the world. This estimable princess wished again for a son, and she obtained one by following my directions. Five other ladies of rank obtained the sex they

desired, by the same method."

Venette, the author of the Tableau de l'Amour Conjugal, a work always in great circulation in France, is of the same opinion. The same fact is also attested by Rhazes, an Arabian writer. Plato, and others, affirmed that the womb sucked in the male fluid by a hydraulic power, and conveyed it through the uterine tube to the ovary, which it fecundated; but many deny this hypothesis, on the authority of the illustrious Harvey, who made numerous experiments on deer, after copulation, but never discovered the male fluid in the uterus.

According to this hypothesis, the seminal vapour, so far from falling by its weight towards the right side of the womb or tube, would always tend to ascend; and by the simple inclination, it would necessarily be directed towards the orifice of the uterine tube, proceeding to the ovary which was not to be fecundated; whilst in placing the woman on the side or back, the relative situation of the organs would be changed. But the last position is that in which generation is usually accomplished, and each side of the uterus, each ovary and tube, are in the same relative situation to the sperma-

tic fluid; and, therefore, we cannot explain how opposite sexes are procreated by the same individuals. If the semen passes to the ovaries, as is generally supposed, it must ascend against its own gravity; and therefore this is a negative proof in favour of the ascent of a vapour from it. The experiments of Spallanzani, and others, who impregnated bitches by injecting the spermatic fluid very warm, as furnished by the male, were unsuccessful when they allowed it to cool, and its volatile part to evaporate. But in many other experiments, the male fluid of frogs, which was not only allowed to cool, but was largely diluted with water, caused impregnation. A remarkable case is mentioned by Mr. Hunter, relating to the human subject. patient of his had fistula in perineo, through which the semen escaped during sexual intercourse, and Mr. Hunter advised him to collect it, and inject it into the vagina, which was done, and caused impregnation. I think this statement by no means satisfactorily proved; for it is not easy to conceive how the fluid could be prolific after its exposure to the air.

M. Venette lays down seven rules for the art of procreating the sexes at will:—1. That persons should not procreate until the body is fully developed at the adult age, as the most vigorous generate more males than females: 2. They should use nourishing food and drink; 3. They should avoid all excesses of the table; 4. To obtain male infants the pleasure of love must be used moderately; for after reiterated enjoy-

ment girls are conceived; 5. That women who menstruate moderately should not deliver themselves to sexual pleasure, until after the end of each period; those who menstruate profusely or too frequently, should not deliver themselves to enjoy the same function but only a short time before or after the evacuation; 6. That girls are begotten most frequently when the heat of the weather is excessive; 7. To obtain sons, the act should be performed when the

wind is northerly. High mental endowments and physical beauty are requisite for the procreation of infants of vigour and of genius. Men of great minds generally unite themselves to women of high mental endowments, and prefer these to pecuniary considerations, family connexions, titles, and transient advantages. The nobility of this country have often married their inferiors in rank; and men of the greatest minds have preferred physical and moral endowments to riches. Many modern instances might be quoted, and some are recorded very frequently in the daily journals. It is admitted that the moral and physical powers of parents, as well as their diseases, are transmitted to their infants.

Now there are unanswerable objections to the preceding hypothesis of procreation of the sexes at will. Jadelot and Velpeau have examined the bodies of women who had but one ovary, though they have brought forth infants of both sexes; birds have but one ovary. The extirpation of one ovary of a sow or other mammiferous animal does not prevent the generation of offspring of both sexes. But I am not aware of any case on record where the parents had but the right or left testis or corresponding ovary, and produced infants of both sexes; and, therefore, the existence of both organs in either, and but one in the other, does

not disprove the hypothesis in question.

All that can be said at present on the procreation of the sexes, amounts to this, that the most vigorous men of a strong constitution have generally engendered more boys than girls; and that the most vigorous of the sexes determines the sex of the offspring.—(Velpeau and others). There are, however, numerous exceptions to this general rule, of which repeated observations have convinced me. It is by no means proved, however, in my opinion, that athletic men are the most prolific, or procreate a greater proportion of their own sex. We often observe the contrary, even when these are united to delicate women; and frequent observations have led me to this conclusion.

I have observed in many families the physical power of parents, and also ascertained the comparative proportion of the sex of their children. But from my limited enquiries I cannot admit that the vigour of either parent invariably determines the sex of the offspring; for though this appears to be the case in some instances, it certainly is not so in others. Thus, we see delicate women and robust husbands produce more boys than girls, and vice versa;

and this is also the result when young and aged

persons are united in marriage.

M. Girou de Buzareingues, whose observations on the breeding of cattle are very extensive, states in his work on Generation, 1828, with a copy of which he very politely favoured me, that very young and old mothers, whether cows, mares, or sheep, produce more males than females; whilst mothers of a middle age produce for the most part more females than males, especially if the first were coupled with old males and the second with young males, which he considers in accordance with the views of nature.

CHAPTER V.

RULES FOR BEGETTING A VIGOROUS OFFSPRING—
COMBE'S OBSERVATIONS—DR. PRITCHARD'S EXPERIMENTS—MIXTURE OF BREEDS—BIRTH OF
NAPOLEON—ILLUSTRATIONS OF THE LAW—BESULTS OF MARRYING YOUNG—LAWS OF HEREDITARY DESCENT—THEIR CONFORMITY TO JUSTICE.

The surest means by which sound and vigorous infants may be engendered, is a good constitution unenfeebled by excessive intellectual or corporeal exertion, or any chronic disease. It is universally admitted that the moral and physical dispositions are transmitted by generation; and hence we may conclude that healthful and vigorous parents can alone produce healthful and vigorous infants. It is also generally concluded that diseased or delicate parents procreate diseased or delicate offspring. The same results are observed in plants and animals. Every one knows the truth of these statements.

How often do we observe a fine, a beautiful woman of an excellent constitution, united to a small, diminutive, aged, broken-down, or deformed companion, or the reverse; and can it be supposed that the physical powers, the sympathies of such individuals, are favourable to

the proper performance of the function of generation? Love cannot be reciprocal in such cases; and animal or organic impulse will prefer that which is more accordant with itself; even brutes prefer males which are possessed of vigour, power, and beauty; and this instinct is implanted by nature in all animals. Whatever perversion civilization may effect in our hearts, tastes, and manners, it cannot extinguish this instinct. Even social or parental authority fails to destroy it; and though this often leads to unsuited conjugal unions, to the procreation of feeble offspring, which are doomed to constant sufferings, a miserable existence, insupportable to themselves and others of society,—still the rights of nature exist inviolate.

Unequal and unsuited alliances are contrary to nature and to sound policy, because highly detrimental to population. Ample proof is afforded of the validity of this opinion, by a reference to the physiology of the various ages of life, and the difference in the genital power

in each.

The observations of Mr. Combe on this

point are graphically correct.

"One organic law is, that the germ of the infant being must be complete in all its parts, and perfectly sound in its condition, as an indispensable requisite to its vigorous development and full enjoyment of existence. If the corn that is sown is weak, wasted, and damaged, the plants that spring from it will be feeble, and liable to speedy decay. The same law

holds in the animal kingdom; and I would ask, has it hitherto been observed by man? It is notorious that it has not; indeed, its existence has been either altogether unknown, or in a very high degree disregarded by human beings. The feeble, sickly, the exhausted with age, and the incompletely developed, through extreme youth, marry, and, without the least compunction regarding the organization which they shall transmit to their offspring, send into the world miserable beings, the very rudiments of whose existence are tainted with disease. If we trace such conduct to its source, we shall find it to originate either in animal propensity, intellectual ignorance, or more frequently in both. The inspiring motives are generally mere sensual appetite, avarice, or ambition, operating in the absence of all just conceptions of the impending evils. The punishment of this offence is debility and pain transmitted to the children, and reflected back in anxiety and sorrow on the parents. Still the great point to be kept in view is, that these miseries are not legitimate consequences of observance of the organic laws, but the direct chastisement of their infringement. These laws are unbending, and admit of no exception; they must be fulfilled, or the penalties of disobedience will follow. On this subject profound ignorance reigns in society. From such observations as I have been able to make, I am convinced that the union of certain temperaments and combinations of mental organs in the parents, are highly conducive to health, talent, and morality in the offspring, and vice versa; and that these conditions may be discovered and taught with far greater certainty, facility, and advantage, than is generally imagined. It will be time to conclude that men are naturally incapable of obedience to the organic laws, when, after their intellectual faculties and moral sentiments have been trained to observance of the Creator's institution, as at once their duty, their interest, and a grand source of their enjoyment, they shall be found to continue to rebel." (The Constitution of man considered in Relation to External Objects, 1835.)

Dr. Pritchard, in his learned and valuable "Researches into the Physical History of Mankind," has accumulated a vast number of facts and opinions on the subject of hereditary qualities and diseases in our species. Among

these he states—

"Children resemble, in feature and constitution, both parents, but I think more generally the father. In the breeding of horses and oxen, great importance is attached by experienced propagators, to the male. In sheep, it is commonly observed that black rams beget black lambs. In the human species, also, the complexion chiefly follows that of the father; and I believe it to be a general fact, that the offspring of a black father and white mother is much darker than a white father and a dark mother."

—Vol. ii. p. 55I,

Mr. Combe comments upon these facts in

the following manner:

"These facts appear to me to be referable to both causes. The stock must have had some influence, but the mother, in all these cases, is not impressed by her own colour, because she does not look on herself; while the *father's* complexion must strikingly attract her attention, and may, in this way, give a darker tinge to the offspring." Black hens lay dark coloured eggs, but the reverse is much more generally the case.

"Dr. Pritchard states the result of his investigations to be, first, 'That the organization of the offspring is always modelled according to the type of the original structure of the parent;' and, secondly, 'That changes produced by external causes, in the appearance or constitution of the individual, are temporary, and, in general, acquired characters are transient: they terminate with the individual, and have no influence on the progeny.'—vol. ii. p. 536. He supports the first of these propositions by a variety of facts occurring 'in the porcupine family,' 'in the hereditary nature of complexion,' and 'in the growth of supernumerary fingers or toes, and corresponding deficiencies.' 'Maupertuis has mentioned this phenomenon; he assures us, that there were two families in Germany, who have been distinguished for several generations by six fingers on each hand, and the same number of toes on each foot,' &c. He admits, at the same time, that 'the second proposition is of more difficult proof, and that an opinion contrary to it has been maintained by some writers, and a variety of single facts have been related in support of it.' But many of these relations, as he justly observes, are obviously fables.

"In regard to the foregoing propositions, I would observe that a manifest distinction exists between the transmission of monstrosities or mutilations, which constitute additions to, or abstractions from, the natural lineaments of the body, and transmission of a mere tendency in particular organs to a greater or less develop-ment in point of size, and energy in their natural functions. This last appears to me to be influenced by the state of the parents at the time when existence is communicated to the offspring. On this point Dr. Pritchard says, 'The opinion which formerly prevailed, and which has been entertained by some modern writers, among whom is Dr. Darwin, that at the period when organization commences in the ovum, that is, at or soon after the time of conception, the structure of the fœtus is capable of undergoing modification from impressions on the mind of the parent, does not appear altogether so improbable. It is contradicted, at least, by no fact in physiology. It is an opinion of very ancient prevalence, and may be traced to so remote a period, that its rise cannot be attributed to the speculations of philosophers, and it is difficult to account for the origin of such a persuasion, unless we ascribe it to the facts which happened to be observed."-p. 556.

" A striking and undeniable proof of the effect on the character and dispositions of children, produced by the form of brain transmitted to them by hereditary descent, is to be found in the progeny of marriages between Europeans, whose brains possess a favourable development of the moral and intellectual organs, and Hindoos, and native Americans, whose brains are inferior. All authors agree, and report the circumstance as singularly striking, that the children of such unions are decidedly superior in mental qualities to the native, while they are still inferior to the European parent. Captain Franklin says, that half-breed American Indians 'are upon the whole a good-looking people, and, where the experiments have been made, have shown much expertness in learning, and willingness to be taught; they have, however, been sadly neglected'-p. 86. He adds, 'It has been remarked, I do not know with what truth, that half breeds show more personal courage than the pure breeds.' Captain Basil Hall, and other writers on South America, mention, that the offspring of native American and Spanish parents, constitute the most active, vigorous, and powerful portion of the inhabitants of these countries; and many of them rose to high commands during the revolutionary war. So much is this the case in Hindostan, that several writers have already pointed to the mixed race there, as obviously destined to become the future sovereigns of India. These individuals inherit from the native parent a certain adaptation to the climate, and from the European parent a higher development of brain, the two combined c nstituting their su-

periority.

"Another example of the same law occurs in Persia. In that country, it is said that the custom has existed for ages among the nobles, of purchasing beautiful female Circassian captives, and forming alliances with them as wives. It is ascertained that the Circassian form of brain stands comparatively high in the development of the moral and intellectual organs. And it is mentioned by some travellers, that the race of nobles in Persia is the most gifted in natural qualities, bodily and mental, of any class of that people; a fact diametrically opposite to that which takes place in Spain and other European countries, where the nobles intermarry constantly with each other, and set the organic laws altogether at defiance.

"The degeneracy and even idiocy of some of the noble and royal families of Spain and Portugal, from marrying nieces, and other near relations, is well known; and defective brains, in

all these cases, are observed.

"Many facts illustrate the influence of the state of the parents, particularly of the mother, at the time when the existence of the child commenced, on its mental talents and dispositions.

"'The father of Napoleon Buonaparte,' says Sir Walter Scott, 'is stated to have possessed a very handsome person, a talent for eloquence, and a vivacity of intellect, which he transmitted to his son. It was in the middle of civil discord, fights, and skirmishes, that Charles Buonaparte married Lætitia Ramolini, one of the most beautiful young women of the island, and possessed of a great deal of firmness of character. She partook of the dangers of her husband during the years of civil war; and is said to have accompanied him on horseback on some military expeditions, or perhaps hasty flights, shortly before her being delivered of the future

emperor.'

"The murder of David Rizzio was perpetrated by armed nobles, with many circumstances of violence and terror, in the presence of Mary, Queen of Scotland, shortly before the birth of her son, afterwards James the First of England. The constitutional liability of this monarch to emotions of fear, is recorded as a characteristic of his mind; and it has been mentioned that he even started involuntarily at the sight of a drawn sword. Queen Mary was not deficient in courage, and the Stuarts, both before and after James the First, were distinguished for this quality; so that his dispositions were an exception to the family character. Napoleon and James form striking contrasts; and it may be remarked that the mind of Napoleon's mother appears to have risen to the danger to which she was exposed, and braved it: while the circumstances in which Queen Mary was placed, were calculated to inspire her with fear alone.

"Further evidence of the same law may still

be mentioned. Esquirol, the celebrated French medical writer, in adverting to the causes of madness, mentions that many children whose existence dated from periods when the horrors of the French Revolution were at their height, turned out subsequently to be weak, nervous, and irritable in mind, extremely susceptible of impressions, and liable, by the least extraordinary excitement, to be thrown into absolute insanity. A medical practitioner of Douglas, in the Isle of Man, mentions the following case:-A man's first child was of sound mind; afterwards he had a fall from his horse, by which his head was much injured. His next two children proved to be both idiots. After this he was trepanned, and had other children, and they turned out to be of sound mind. A lady of considerable talent wrote as follows to a phrenological friend :- 'From the age of two, I foresaw that my eldest son's restlessness would ruin him; and it has been even so. Yet he was kind, brave, and affectionate. I read the Iliad for six months before he saw the light, and have often wondered if that could have any influence on him. He was actually an Achilles.'

"In a case which fell under my own observation, the father of a family had been sick, had a partial recovery, but relapsed, declined in health, and in two months died. Seven months after his death, a son was born, of the full age; and the origin of whose existence was referable of the period of the partial recovery. At that time, and during the subsequent two months, the faculties of the mother were in high excitement, in ministering to her husband, to whom she was greatly attached; and, after his death, the same excitement continued to operate, as she was then loaded with the charge of a numerous family, but not depressed; for her circumstances were comfortable. The son is now a young man; and, while his constitution is the most delicate, the development and activity of the mental organs are decidedly greater in him than in any

other member of the family.

"Another illustration of the same law is found in the fact, that when two parties marry very young, the eldest of their children inherits a less favourable development of the moral and intellectual organs, than those produced in more mature age. The animal organs in men, in general, are most vigorous in early life, and this energy appears to cause them to be then most readily transmitted to offspring. Indeed it is difficult to account for the wide varieties in the form of the brain in children of the same family, unless on the principle, that the organs which predominate in vigour and activity in the parents. at the time when existence is communicated, determine the tendency of corresponding organs to develope themselves largely in the children. Since the first edition of this work was prepared, so many facts illustrative of the truth of this principle have been communicated to me, and observed by myself, that I now regard it as probable.

" If this be really the law of nature, as there

is great reason for believing, then parents, in whom combativeness and destructiveness are in habitual activity, will transmit these organs, in a state of high development and excitement, to their children; and those in whom the moral and intellectual organs exist in supreme vigour, will transmit these in greatest perfection.

"This view is in harmony with the fact, that children generally, although not universally, resemble their parents in their mental qualities; because the largest organs being naturally the most active, the general and habitual state of the parents will be determined by those which predominate in size in their own brains; and on the principle that predominance in activity and energy causes the transmission of similar qualities to the offspring, the children will, in this way, very generally resemble the parents. But they will not always do so; because, even the very inferior characters, in whom the moral and intellectual organs are deficient, may be occasionally exposed to external influences, which, for the time, may excite these organs to unwonted vivacity; and, according to the rule now explained, a child dating its existence from that period, may inherit a higher organization of brain than the parent. Or, a person with an excellent moral developement, may, by some particular occurrence, have his animal propensities roused to unwonted vigour, and his moral sentiments thrown, for the time, into the shade; and any offspring connected with this condition would prove inferior to himself in the development of the moral organs, and greatly surpass him in the size of those of the propensities.

"I repeat, that I do not present these views as ascertained phrenological science, but as inferences strongly supported by facts, and consistent with known phenomena. If we suppose them to be true, they will greatly strengthen the motives for preserving the habitual supremacy of the moral sentiments and intellect, when, by doing so, improved moral and intellectual capacities may be conferred on offspring. If it be true that this lower world is arranged in harmony with the supremacy of the higher faculties, what a noble prospect would this law open up of the possibility of man ultimately becoming capable of placing himself more fully in accordance with the Divine institutions, than he has hitherto been able to do; and, in consequence, of reaping numberless enjoyments that appear destined for him by his Creator, and avoiding thousands of miseries that now render life too often only a series of calamities. The views here expounded also harmonise with the second principle of this Essay; namely, that, as activity in the faculties is the fountain of enjoyment, the whole constitution of nature is designedly framed to support them in ceaseless action. What scope for observation, reflection, the exercise of moral sentiments, and the regulation of animal impulse, does not this picture of nature present!

"I cordially agree, however, with Dr. Pritchard, that this subject is still involved in great

obscurity. 'We know not,' says he, 'by what means any of the facts we remark are effected; and the utmost we can hope to attain is, by tracing the connexion of circumstances, to learn from what combinations of them we may expect

particular results."—Vol. ii. p. 542.

Mr. Combe further judiciously observes:-"A man and woman about to marry have, in the generality of cases, the health and happiness of five or more human beings depending on their attention to considerations, essentially the same as the foregoing, and yet how much less scrupulous are they than the mere speculators in money? It is pleasing, however, to observe, that in Wurtemburg there are two excellent laws calculated to improve the moral and physical condition of the people, which other states would do well to adopt. First: 'It is illegal for any young man to marry before he is twenty-five, or any young woman before she is eighteen; and a young man, at whatever age he wishes to marry, must show to the police and the priest of the commune where he resides, that he is able, and has the prospect, to provide for a wife and family.' The second law compels parents to send their children to school from the age of six to fourteen.

"There is no moral difficulty in admitting or admiring the wisdom and benevolence of the institution by which good qualities are transmitted from parents to children; but it is frequently held as unjust to the latter, that they should inherit parental deficiencies, and so be made to suffer for sins which they did not commit. In treating of this difficulty, I must again refer to the supremacy of the moral sentiments, as the theory of the constitution of the world. The animal propensities are all selfish, and regard only the immediate and apparent interest of the individual; while the higher sentiments delight in that which communicates the greatest quantity of enjoyment to the greatest number. Now, let us suppose the law of hereditary descent to be abrogated altogether, that is to say, that each individual of the race was, at birth, endowed with fixed natural qualities, without the slightest reference to what his parents had been or done! this form of constitution would obviously cut off every possibility of improvement in the race."

I have made these long quotations from a vast number of others equally pertinent to the subject under consideration, but I must refer to Mr. Combe's work, all who are desirous of valuable information on the requisites, both moral and physical, for matrimonial engagements, and the propagation of healthful offspring. Every physiologist will agree with this talented author, "that the children of the individuals who have obeyed the organic, the moral, and the intellectual laws, will not only start from the highest level of their parents in acquired knowledge, but they will inherit atendency towards an enlarged development of the moral and intellectual organs, and thereby enjoy an increasing capability of discovering and obeying the Creator's institutions."

CHAPTER VI.

PATHOLOGY OF THE GENERATIVE ORGANS—MALFORMATIONS AND DISEASES OF BOTH SEXES, WHICH DISQUALIFY FOR MARRIAGE, CAUSE IMPOTENCE AND STERILITY, OR WHICH INJURE OR DESTROY THE OFFSPRING—ILLUSTRATIVE ANECDOTES—CONDITIONS NECESSARY FOR COPULATION ON THE PART OF THE MALE—CAUSES OF WANT OF ERECTION—TREATMENT OF THIS FORM OF DISEASE—CURE OF SEMNINAL WEAKNESS—HORRORS OF MASTURBATION—IMPORTANCE OF OVERCOMING THE HABIT—DIRECTIONS FOR CURE.

Some complaints are aggravated by marriage, such as inveterate scrofula, epilepsy, confirmed phthisis, caries of the vertebræ, distortion of the spine, diseases of the heart and large vessels, &c. The deformity of the bones, termed rickets or rachitis, is often transmitted to infants; and this predisposition in the female exposes her to spinal and pelvic deviations; and it too often happens, in such cases, that the very moment she hopes to become a mother, she is consigned to the tomb.

Fodère says, marriage should be interdicted when the sacro-pubic diameter of the entrance to the pelvis is less than four inches; Orfila, when it is less than three inches; but contractions of the outlet or perineal aperture are as strong objections. When the deformity is such, that an infant cannot be born through the natural passage, must be dismembered, or extracted by the Cæsarian operation, marriage ought to be interdicted, according to theologians and physicians. Mania, and other forms of mental imbecility, are impediments to the marriage contract, because it is necessary for the proper formation of this compact, that there should be capacity to contract, and the consent of both

parties.

It is well known to all practical obstetricians, that women who become mothers at an early age, purchase the honour of maternity at a very dear rate. Such persons are liable to numerous disorders during pregnancy; the pelvis is badly able to support the gravid uterus-it is too small for the passage of the infant; consequently, parturition will be laborious and protracted, and must frequently be completed by artificial means; while the degree of pressure produced by this process on the important organs, or soft parts, covering the bones, as the bladder, vagina, and rectum, causes great suffering danger to the woman, inflammation, gangrene, or sloughing, and may be followed by deplora-ble diseases, which prevent cohabitation, and even cause death itself.

It is also generally admitted, by the most eminent modern writers, that the present mode of female education is highly injurious to health, predisposes to spinal curvature, and, consequently, to deformity of the hip and other bones, thereby often rendering parturition highly dan-

gerous and fatal.

Again, great injury is inflicted on the natural development of children and young females, by the foolish custom of tight lacing, which impedes the functions of the thoracic and abdominal viscera; prevents the development of the breasts and nipples; for these organs are considerably absorbed from pressure—the lactiferous ducts are almost obliterated-the nipples will be undeveloped at the end of pregnancy-lactation will be impeded or absent after delivery-the natural food of the offspring greatly diminished -while the mother will be affected with inflamed breasts, or sore nipples, which may lay the foundation of cancer. It has been already observed, that the human female is unfit to cooperate in the function of procreation until after the twelfth or fourteenth year in this climate, or until menstruation is established; for, at an earlier age, the sexual organs are imperfectly developed; there is no venereal desire; and sexual intercourse is extremely painful. Hence the cruelty and barbarity of violating female children of a tender age.

The male is also incapable of performing his part in the mysterious process of reproduction until after puberty, and, according to the law of this country, before the fourteenth year. There are, however, some few exceptions, as

will appear hereafter.

There is no subject which distresses most married persons so severely, as want of offspring, or which leads to so much domestic unhappiness, or so often to infidelity. It is therefore necessary for the medical practitioner to be well informed on all the causes which prevent both sexes from accomplishing the act of procreation. Indeed this knowledge is valuable to all classes of society. Impotence may be urged to obtain a divorce, or to repel a charge of bastardy or rape, and also in disputed cases of paternity, legitimacy, or right to succession. The multiplication of the species being the real end of marriage, the laws of many countries allowed a divorce in case of incurable impotence in either party, at the time of marriage. The existence of this state must be proved by medical witnesses, and matrons are also appointed to investigate it in women. Marriage is not dissolved when sexual imbecility occurs after the ceremonial, because the contract was fair and just between the parties. Divorce is never granted at present, in this country, but on the grounds of adultery or mal-treatment. Nevertheless, it is important to those about to form matrimonial alliances, to know the causes of impotence and sterility.

All disqualifications for matrimonial union may be divided into two classes. First, those caused by defect of mental power; and secondly, those caused by defect of sexual organization. The disqualifications are, therefore, moral and physical, and are usually expressed by

the terms impotence and sterility. These terms are often used synonymously, though widely different. Impotence consists in the incapacity for copulation, or in the impossibility of exercising the venereal act; sterility consists in the aptitude of the organs for procreation, without the power of reproduction. Thus a person may be impotent but not sterile, and vice versa. Some writers apply the term impotence to the male; but such a distinction is arbitrary and unscientific. The female may be impotent from malformation, and the male sterile from excessive venery, onanism, self-pollution, and diseases of the testicles. A man who is impotent is necessarily sterile; but a woman may be impotent and not sterile. I need scarcely remark, that sterility does not afford a just plea for the nullity of marriage. The manifest causes of impotence in both sexes, may be divided into physical and moral.

Physical, manifest, natural, or accidental impotence of the male.—The causes of manifest impotence of the male, are absence of the penis or testicles. There must be total loss of the penis, as the slightest penetration into the vagina is sufficient for procreation. There may be congenital want of the penis, or it may be partially lost by accident, as by the bites of animals, burns, wounds, or surgical operations. It may be removed close to the pubes, yet the ejaculatory muscles retain their power, and will propel the semen with sufficient, indeed the natural force, so that it may effect impregnation. A case was

published a short time since, in our public police reports, of a young woman who was jealous, and who concealed a razor, with which she removed the penis, while in the sexual act, close to the pubes. The mutilated husband recovered, notwithstanding the hemorrhage, and went to cohabit with another woman, whom he illegally married. His first wife ascertained that his second was pregnant, expressed great sorrow for her act, and induced him to return to her. He did so, and then the second wife appeared before a magistrate to swear or affiliate the infant to him, of which she was pregnant. In this case the ejaculatory power remained perfect, though a large portion of the penis was removed; and I have known other cases in point.

The absence of one or both the testicles from the scrotum, is no proof of their non-existence in the abdomen, unless the penis be small, the voice puerile, the beard absent, the form delicate, and the whole physical and moral constitution feminine. It is well known, that the testicles may not descend into the scrotum, though they may be fully developed in the abdomen, and perform their functions perfectly; indeed, according to some writers, much better than in the natural situation, but this is questionable.

Rolfinck relates the case of a libertine who was executed, and in whose abdomen the testicles were found fully developed. This author advised a young man in a similar situation to marry, and a numerous offspring proved the correctness of the advice (Mahon). It is stated by

Bichat, on the authority of Roux, that the testes do not descend in some of the natives of Hungary, until some months, or even years, after birth (Brewster's Enc.) Pope Sextus V. decreed, in 1587, in a letter to his Nuncio in Spain, that those destitute of them in the usual situation, should remain unmarried; and Philip II. confirmed the order, which affected many inthat kingdom. The Parliament of Paris made a similar law in 1665 (Mahon.) I was once consulted by a robust and healthful young gentleman, aged twenty-six years, who had but one testicle in the usual situation, as to the propriety of his marrying a young lady, whose fortune was 70,000l.— There was no cicatrix on the vacant portion of the scrotum, the other testicle had never descended; and he was otherwise well developed. I advised him to marry. He did so, and has had children. Simon states, that he knew a soldier who had no testicles in the scrotum, though he had children, and very much disappointed his paramours. (Rolfinck.)

The destruction of one testicle by castration or disease is no impediment to procreation, no more than the loss of one eye is to the vision. But when both testicles are completely diseased, their secretion is injured or suppressed, and incurable sterility is the consequence. Frequent seminal emissions, or the sudden secretion of semen during coition, is generally an effectual bar to reproduction. The secreting power of the testes may be very much increased or diminished. The more fluid parts of the spermatic

fluid must be absorbed, and the semen must be retained some hours to effect procreation. Both parties must also have been for some time con-

tinent, and likewise in good health.

Both testicles may be removed by castration, yet procreation may be accomplished, as the vesiculæ seminales, or seminal receptacles, may contain at the time of the operation, a sufficient quantity of semen for one or two prolific emissions, after which the person will be sterile, but not impotent, Baron Boyer was consulted by a man whose testicles were removed in consequence of scirrhous enlargement. He afterwards knew his wife, and she became pregnant. He feared that he was not the father of the infant she carried; but M. Boyer assured him that he might be, and if so, this would be his last infant. It is scarcely necessary to observe that dogs, swine, horses, bullocks, &c., generate with one testicle. Even eunuchs have erections and emissions, but the latter consist of the prostatic fluid, the mucus of the seminal vesicles and urethra, and are unprolific.

The celebrated John Hunter advised a man whose urethra opened in the perineum to collect the seminal fluid when effused, under the scretum, and inject it into the vagina with a syringe. Impregnation was said to have followed; an individual was born, whose grand-daughter is now living in London. I very much doubt the authenticity of this case, and do not believe it; because the emission should be very profuse before it could be drawn into a syringe, and even in

such case, when cooled by the instrument, could scarcely be prolific.

It is certain, however, that animals have been impregnated by injecting the male sperm into

the vagina.

The dimensions of the penis, such as extraordinary thickness and length, are considered by some writers as causes of impotence. Fodère is of opinion, that the respective sexual organs may be so disproportionate as never to be adapted to each other; and the physical inconveniences are such as to expose the female to great injury and danger to her health. A case lately occurred in this metropolis, the particulars of which were, that though the female was of ordinary stature and well formed, the marriage could not be consummated. The case was mentioned to me by a medical friend, but he could not state whether any malformation or disease existed. The husband received her fortune, and refused to restore any part of it, though the woman returned to her family. There was a model of the genital aperture of this individual in the collection of the late Mr. Miller, of Theobald's Road. There was a fleshy growth projecting at the vulva, which nearly closed it, and would not admit a goose-quill.

"It must be admitted, however," M. Fodère observes, "that thickness of the penis, which excites great pain in some women, procures voluptuous sensations in others, and that the vagina is capable of great dilatation, which may be effected by gentle and gradual efforts, and re-

duced to a state capable of receiving the virile member. "Though extreme length of the penis," he continues, "may produce contusion of the os and cervix uteri, it cannot be deemed a just cause of impotence, because, by certain precautions, this danger may be avoided, unless there is great difference between the age of the

parties."

A woman, aged thirty-eight, was a patient of mine, at the Western Dispensary, Westminster, in the summer of 1835; and is now under my care in the Metropolitan Free Hospital, 1839; who gives the following history of her condition. She is married eighteen years, but never menstruated. She suffered great pain after marriage, and consummation could not be effected Dr. Elliotson examined her at St. Thomas' Hos pital, and referred her to the late Mr. Cline, who operated upon her, and told her the passage (vagina) was contracted. Four years after wards, Mr. White, of Parliament Street, open ted on her, and told her that the mouth of the womb was closed, and turned "the wrong way." Her husband has repeatedly said to her, that she differs from other women. On examination, discovered the vagina about an inch in length and no trace whatever of the orifice of the woml She states, that she suffers great pain during conjugal intimacy, unless her husband is call tious. She suffers severe pain in the pelviser ery month, which is relieved by opium. Joe of Arc was in a similar condition. I have know three cases of vesico-vaginal fistula, in which

the vagina was so contraacted, by inflammation and its consequences, that sexual congress was

impracticable.

Diminutiveness or shortness of the penis is no proof of impotence, as the slightest penetration and emission are sufficient for impregnation. I have known several cases of this description, in which the greater part of the organ had been destroyed by sloughing.

Obliquity, tortuosity, or bifurcation of the penis, bad stricture of the urethra, phymosis, paraphymosis, warts, chordee, chancres, or excessive length of the frænum, cannot be considered absolute causes of impotence, as they can be re-

medied by surgical operations.

Three conditions are necessary on the part of the male for copulation-erectio, et intromissio penis, cum seminis emissione. Impotence in men depends on defect of some one or more of these conditions; erection, intromission, and ejaculation of the spermatic fluid. The causes of impotence are more commonly observed in man than in the other sex; and this is easily accounted for, by the greater part the male has to perform in nuptial congress. This is evident from the phenomena which give the virile member the form and disposition proper for erection, the introduction of the organ, and the ejaculation of the semen, which are effected by a violent and complicated action, which requires a concurrence of many indispensable conditions, as the organs not only contract spasmodically to effect the expulsion of the male fluid, but all the body participates in the convulsion at the moment of the emission, as if nature at this instant forgot every other function. The causes of impotence in man arise from two sources, from malformation of the genitals, or from want of action in them; but in females, impotence can only depend on malformation, either natural or

acquired.

The causes of want of erection may be divided into physical and moral. The physical causes depend on defects of the body, as paralysis of the penis, curvature of the spine, frigid and apathetic temperament. The moral causes are such as act powerfully on the imagination, and suddenly produce an atony of the genitals, or induce an inactivity in organs properly developed. "The genital organs," says M. Virey, "offer two states in the young and old, which are the frozen zones of existence; the intermediate state is the torrid zone of life. The infant has nothing to give, the old has lost all." Immaturity of age, and senescence, are often causes of want of erection. This doctrine, though generally correct, admits of exceptions, as children have been precociously developed even before the fourth year, examples of which have often been cited; and this celebrated author describes a boy, aged seven years, a native of the department of Lot, who was as fully developed as an adult, and who made the most comically furious attacks on his female acquaintance, and absolutely deprived one of them of that which she could never regain. It is also stated, that a boy of ten years of age became a father during the excitement of the French revolution. Among the causes of want of erection we must reckon a frigid or apathetic constitution, a total insensibility to sexual desire, and this is said to be of a profound lymphatic temperament. Descourlitz describes persons of this temperament in these words:-" The hair is white, fair, and thin, no beard, countenance pale, flesh soft and without hair, voice clear, sharp, and piercing; the eyes sorrowful and dull, the form round, the shoulders straight, perspiration acid, testicles small, withered, pendulous, and soft, the spermatic cords small, the scrotum flaccid, the glands of the testicle insensible, no capillary growth on the pubes, a moral apathy, pusillanimity and fear on the least occasion, are symptoms of anaphrodisia, or impotence, or sterility; and any one having the majority of these signs is incapable of copulation or generation."

A habitude of chastity is another opponent to erection, such as characterised the ancient fathers of the desert, and those who, by fasting and other forms of the church discipline, generally, but not always, extinguish certain desires implanted by nature, but in their opinion, contrary to that purity which should distinguish those who have made vows of chastity. The sexual organs of such persons decay, like all other organs whose functions are not exerted. Long continued debauchery, whether with women or by masturbation, will also cause impotence. "The impotence," says Pinal, "caused by the latter

excess, reduces youth to the nullity of old age, and is too often incurable." Impotence is often caused by debility of the genital organs, induced by precocious venereal enjoyments; or by the abuse of the sexual function by solitary indulgence or masturbation. In these cases, there is often want of erection, and should a seminal emission take place, the semen does not possess its prolific power. This form of impotence is often irremediable, though I have cured many persons of it, who had several involuntary emissions of the spermatic fluid daily, with and without erections or amorous impulse. One of these patients was treated by Professor Colles of Dublin, and myself. I could give the histories of several cases of this description, did not delicacy forbid it. This is the disease termed seminal weakness, or debility, by advertising empirics, and is accurately described in a late number of the Medical Gazette of Paris, by Professor Lallemand of Montpellier; M. Tissot on onanism and the diseases caused by masturbation, or self-pollution; and M. Desglandes on onanism and the other venereal abuses, in their relations to health. It is a practice of the most destructive tendency, pregnant with mental and physical evils. The concurrent testimonies of all writers on the subject amply illustrate its baneful consequences. Hippocrates, in his works, notices it: Celsus also, in his book on the Preservation of Health, remarks, "These habits are always hurtful, and the indulgence in them weakens the strengest constitution."

Actius gives a dreadful picture of their evils :-"Young people (says he) have the air and appearance of old age; they become pale, effeminate, lazy, benumbed, base, stupid, and even imbecile; they have an utter distaste for everything, are totally incapacitated, and many become paralytic." Galen, also, mentions similar evils as resulting from this destructive habit. Hoffman says, "After frequent nocturnal pollutions, not only the powers are lost, the body falls away, and the face turns pale; but, moreover, the memory fails, a cold sensation seizes all the limbs, the sight is clouded, and the voice becomes hoarse; all the body languishes by degrees; disturbing dreams I revent sleep admin-istering any relief." Boerhaave remarks, that "The loss of too much semen occasions lassitude, debilitates, and renders exercise difficult; it causes convulsions, emaciation and pains in the membrane of the brain; it deadens the senses, and particularly the sight. I have seen (he continues) a patient whose disorder began by lassitude, and a weakness in all parts of the body, particularly towards the loins; it is attended with an involuntary motion of the tendons, periodical spasms, and bodily decay, insomuch as to destroy the whole corporeal frame."

Let the community be enlightened on this subject, and let the young know that if they indulge in this odious vice, the secret will out; and that not only their physicians, but their friends, will know the shameful cause of their disease, and it shall operate as a powerful re-

straint. It should be remarked, however, that the indications are not always infallible, and we

should not form a hasty judgment.

Predisposing causes should be removed. Let the diet and regimen be such as to prevent premature development of the passions and all physical precocity. If children are brought up in an idle, effeminate, and luxurious manner, their persons are, "ke tinder, ignited by the first spark that falls upon them. If the laws of physiology were obeyed, and external excitments removed, the sexual appetite would sleep on, as nature designed, till the transition from boyhood to manhood, instead of being forced into action at from five to ten years of age, as we have seen.

It is not only in private schools that this sin rages; our public seminaries and colleges are not exempt from it. The heads of our universities are particularly scrupulous in driving from their neighborhood the frail fair, lest they should contaminate the votaries of learning; whilst a vice far more degrading in its practice, and infinitely more baneful in its effects, rages within the very sanctuaries of classic lore. Many a brilliant genius has sunk into fatuity beneath its degrading influence. Loss of memory, idiocy, blindness, total impotence, nervous debility, paralysis, stranguary, &c. are among the unerring consequences of an indulgence in this criminal passion.

Numerous instances are mentioned by medical writers, where this horrid habit of mastur

bation has been implanted in the young, when infants, by nurses and servants, who to still their cries, or prevent fretfulness, would titillate the genital parts. What a responsibility rests upon parents to see that no such vile and destructive outrage is perpetrated upon their children!

To overcome this detestable habit, engage in some absorbing subject or enterprise, in which self will be forgotten. Shun solitude; seek the restraints of company; lust evaporates in the presence of virtuous society. Avoid idleness, especially all vacuity of mind—"The idle man's brain is the Devil's work-shop."

If other motives fail to cure the voluntary practice, consider the dreadful consequences of

continuing in it.

Last, and most important, cultivate abiding religious impressions, and a sense of the presence of God, and consider his threatenings

against all impurity.

To restore the health and vigor of the body, "the regimen," says Dr. Woodward, "must be strict, the diet should be simple and nutritious, and sufficient in quantity; it should be rather plain than light and abstemious; no stimulating condiments should be used, the suppers should be particularly light, and late suppers should be wholly avoided. All stimulating drinks, even strong tea and coffee, should be discarded; cider and wine are very pernicious; tobacco, in all its forms, not less so."

Cold bathing is an important auxiliary-fric-

tion of the skin with a coarse towel or brush; labor or other exercise in the open air is absolutely necessary to increase the strength, and cause an equal circulation of blood; the amount must not be too great, but sufficient to produce such a degree of fatigue as will favor quiet rest. Let the bed be hard—the covering not too warm. Avoid all mental and nervous excitement in the evening, and everything that might prevent undisturbed repose. Retire to rest, not till inclined to fall asleep, and arise as soon as awake.

This course must be persevered in, and health will gradually return. If the exigency of the case demands active medicines, they should be prescribed by an experienced physician; but these are to be considered only temporary auxiliaries. The only ground of hope is the strength of will and lingering power of goodness in the individual.

CHAPTER VII.

ABUSE OF THE REPRODUCTIVE FUNCTIONS—
MEANS OF CURE—EFFECTS OF SEVERE STUDY
ON THE GENERATIVE ORGANS—EVILS OF EXCESSIVE VENERY—DR. HUNTER'S ADVICE TO TIMID
BRIDEGROOMS.

It would be contrary to the national taste and propriety to give a detail of the numerous diseases caused by the abuse of the reproductive function, or to indite the frightful accounts recorded by Tissot, which are daily attested by numerous cases which come before us. It is sufficient to insert, in a consecutive form, the general symptoms caused by venereal excesses, of whatever kind; and these have been repeatedly witnessed and recorded by the most eminent medical authors.

The principal diseases which result from the abuse of the generative function are the following, though a much greater number might be added: emaciation, debility, derangement of the digestive functions, nervousness, hypochondriasis, hysteria, despondency, melancholy, idiotcy, temporary insanity, which leads to suicide, imperfection or loss of vision, hearing, smell, and partially of touch; apoplexy, and other diseases

of the brain, cerebellum, spinal marrow, epilepsy, chorea or St. Vitus's dance, mental alienations, neuralgic pains in different parts of the body; rheumatism, gout, hæmorrhoids, or piles, scrofula, pulmonary tubercles or consumption, asthma, diseases of the heart and large vessels, ratchitism or rickets, friability or brittleness of the bones, low continued fevers, such as typhus, nervous, bilious, and hectic fevers, satyriasis and nymphomania, uterine nervous pains, or neuralgia, which may extend to the ovaries, lower part of the back, and one or both inferior limbs, shoulders, arms, and different parts of the body, priapism or constant erections of the penis, insensibility and impotence of the generative organs, introductions of foreign bodies into the urethra or vagina, mutilations of the male organs, incarceration of the penis in foreign bodies, paraphymosis, herpes preputialis, discharge from the glans penis, termed balanitis, incontinence of urine, spermatorrhæa, pollutions, nocturnal and diurnal, diseases of the testicles and spermatic cords, as hydrocele, varicocele, circocele; discases of the clitoris, nymphæ, labia, inflammation of the vulvo-vaginal mucous membrane, called leucorrhæa or whites, female pollutions, prolapsus or descent of the womb, scirrhus, and cancer of the womb and surrounding parts, uterine hæmorrhage, sterility, and deterioration of the offspring.

I might give several illustrations of each of these diseases which have fallen under my own observation and treatment; but I shall content myself by stating that the chief indication of prevention, is the suppression of amorous desire the moment it arises in the mind, unless when it may be indulged in according to the dictates of nature. This is to be accomplished by proper attention to a religious, moral, intellectual, and physical education, and by constant occupation of both mind and body. In all cases, the general health ought to be improved, and urgent diseases combatted by appropriate remedies. The application of cold to the genitals and perineum is often of great advantage, and counter-irritation on the perineum and sacrum are also effectual remedies. Sedative plasters are likewise The frequent use of bougies are advantageous in some cases. Tonics and chalybeates are highly useful. Compression of the penis by a bandage or other means on retiring to rest will frequently awaken the individual when an erection occurs, and prevent nocturnal emissions. These remedies, WITH MORAL CONTROLL, will generally effect a cure.

In some cases, the sexual system is excited at night or when the body is heated, by insects peculiar to the pubes. These are readily destroyed by applying strong mercurial ointment, or the solution of the oxymuriate of mercury, and then washing the part with soap and warm water. As a general rule, every cause, whether mental, physical or mechanical which excites the

organs, ought to be avoided.

Tissot, in his Treatise on Literary Men, mentions some curious examples of the bad effects

of severe study on the generative functions .-Peyrilhe reports the following case: A mathematician, profoundly occupied with some problems which he could not resolve, was so affected when he caressed his spouse, he could not ejaculate. His wife consulted the narrator of this case, who advised her to cause an amorous joyous excitement in her husband, and to seize this moment to receive his caresses. She rigorously followed the advice, and her husband regained his powers. Excessive desire or love may cause impotence. A man, aged thirty-six years, of a good constitution, was married to a healthful woman, aged twenty-six. Both were in good health, and extremely desirous of having children; but the husband could not ejaculate on account of the vigour of erection and rigidity of the penis, and he was forced to retire before the consummation of the act. cumstance was the more remarkable, as he had experienced no difficulty with other women, and had children by his first wife.

There is a similar case recorded in the Edinburgh Medical Essays. Dr. Cockburn ascribed the want of emission in the subject of this case to the excessive vigour of the erection, which entirely closed the urethra. Slight evacuations

and refrigerants effected a cure.

I have also been consulted in many similar cases.

Every exciting or depressing passion which operates during the act of reproduction, may be a temporary cause of impotence. All causes of

debility, whether moral or physical, impede the function of generation. Priapism and satyriasis impede seminal emission, and may be causes of impotence and sterility.

Dr. Gall observed in his lectures, that such

clergymen of the Roman Catholic church, as were considered in the odour of sanctity, were remarkable for atrophy of the genital organs.—

No medical man can deny it.

Monstrous enlargements of the penis and scrotum, constant priapism, induced by local or constitutional irritation in some persons, but most frequently the result of a long course of dissipation and libertinism, cause impotence. The late Mr. Norris, of the Old Jewry, who was one of the examiners at the Royal College of Surgeons in this metropolis, published a case in the London Medical and Physical Journal, of a man affected with priapism, who performed the generative act fifteen times in one night; but it is not mentioned whether impregnation followed or not. Similar cases are recorded.

Many debilitating diseases, such as typhusfever, purpura hemorrhagica, anasarca, infiltration of the penis and scrotum, falls and blows on the head or spine, are also causes of impo-

ence.

It is known to every well-developed adult, that the inflence of the mind is very great on the generative function, and may wholly prevent the completion of the act. If the imagination wanders from the real object of desiring species, impregnation is often, but not always impeded,

and issue seldom follows. Sterne has happily commented on this point, in the first chapter of one of his most popular works; and his views are strictly physiological. When the one party entertains dislike or disgust to the other, or when either allows the mind to be occupied with the image of another individual, the act of generation may be duly performed, and the offspring will bear a strong resemblance to the person who occupied the imagination of the party. Dr. A. T. Thomson gives a remarkable example of this kind in his Lectures on Medical Jurisprudence, published in the London Medical and

Surgical Journal, 1834.

There are many cases in which impotence is caused by the hatred and disgust of the husband towards his wife, though he is capable of cohabiting with other women. The histories of profligate men have often demonstrated, that a man may be impotent with one woman, but a new and more attractive object arouses his corporeal energies, and assists the completion of the sexual function. This position is well illustrated by the case of the Earl of Essex, and Lady Frances Howard, which occurred in 1613, in which the marriage was declared void by the king, though the Archbishop of Canterbury was against granting a divorce. The earl admitted he was impotent with his wife, but not so with other women. The following are the particulars of the case:-

The countess transferred her affections to the royal favourite Carr, Viscount Rochester, (afterwards Earl of Somerset), and being desirous of

a divorce, complained that her husband was im-She deposed, that for the space of three years they had lain together, and during that time he had repeatedly attempted to have connexion with her without success. She also stated. that she was still a virgin, and several peeresses and matrons, who were directed to examine her, corroborated this statement, although it is mentioned that she substituted a young female of her own age and stature in her place during the examination. She was also pronounced to be well fitted for having children. The earl, in his answer, admitted his inability to know her, while he denied his impotence as to other females, and insinuated his belief of her incompetency for copulation. After the examination of numerous witnesses, objections were raised by Abbot, the Archbishop of Canterbury, and one of the king's delegates on this trial, to the propriety of dissolving the marriage on such grounds; to which the king vouchsafed an angry reply. It was finally decided by the vote of seven delegates (five being absent, and not consenting,) that the marriage should be dissolved, and the parties allowed to contract new marriage ties .-Hargrave's State Trials, vol. i. p. 315. See also No. 1, in the Appendix to vol. viii., being a narrative of the proceedings on the trial, drawn up by the Archbishop of Canterbury. In the speech which he intended to have delivered on giving his opinion, he related the case of one Bury, who was tried in 1561. His wife cited him before the ecclesiastical court on the ground of impotence, and the physicians deposed that he had but one testicle, and that not larger than a bean. The want of access was also proved. A sentence of divorce accordingly passed. After some time Bury married again, and had a son by his second wife. A question arose after the lapse of some years, whether his offspring was legitimate, and it was decided that the second marriage was utterly void, because the ecclesiastical court had been deceived in the opinion they had given on the impotency of Bury. (Page 23 of the Ap-

pendix.)

A case somewhat similar occurred in France. 1653. The Marquis of Langey, aged 25 years, married a lady between thirteen and fourteen years of age. They lived happily as man and wife for four years: and a short absence from home, induced the marchioness to express great anxiety and tenderness of affection for the return of the marquis. Soon after this, the wife accused the husband of impotence, and declared herself a virgin. The marquis, piqued at this, demanded the custom then sanctioned by the laws of his country-trial by congress. The judge ordered it; the lady appealed; but the decree was confirmed. A jury of five physicians, five surgeons, and five matrons, was empaneled. They filled their reports with the most obscene details, and gave their decision against the marquis. The marriage was declared void, on the 8th of February, 1659, the husband decreed to pay all costs; to return the fortune he received; and he was ordered not

to marry, while the marchioness, now Madlle. de St. Simon, was left at liberty to do so.

The marquis submitted a legal protest against the decision that he was impotent, and declared his intention to marry. The lady married the Marquis of Boisle, by whom she had three daughters. The marquis likewise married and had seven children.

In fine, the Marchioness of Boisle, explained, on her death bed, the stratagem which she employed to annul the marriage. The minister of public justice seized upon this declaration, and brought in a law, which abolished, for ever, the indecent and useless proof of virility, of trial by congress. It may be stated, that it had been abolished by Justinian, about the fifth century, as an outrage on the purity of the Christian re-

ligion.

There are many causes of impotence besides those already mentioned, which may be briefly noticed. Long watching, great fatigue, mental or corporeal, want of nutriment, excessive evacuations, sanguineous or otherwise of blood, bile, fæces, saliva, menses, scorbutus, scurvy, cachexia, marasmus, peripneumonys, hydrothorax, anasarca, malignant fevers, diseases of the brain and spinal marrow, whether from external injuries or poisons, and numerous other diseases, are temporary causes of impotence. Sexual desire is suppressed by acute diseases, and usually returns after convalescence. Zacchias and Beck relate numerous cases in proof of this position. We see this further illustrated during

the commencement of convalescence after fevers, when erection is frequently observed. Some diseases stimulate the generative organs, as calculus in the kidneys or bladder, stricture of the urethra, diseases of the prostate gland, as well as gout, rheumatism, consumption, piles, mania, itch, leprosy, and other cutaneous affections.

Other complaints may diminish or suppress venereal desire for days, weeks, months, or years, and then the function may be restored.

(Zacchias).

Excessive venery is a frequent cause of want of erection and impotence. I have been consulted in several cases of this description. This is a frequent cause of want of effspring in young married persons, as well as in those who indulge in a solitary vice. In these cases, the semen may escape without the aid of the ejaculatory muscles, is imperfect in quality, and devoid of prolific power until the health is improved. There is generally inflammation of the seminal vesicles in these cases, and seminal debility or spermatorrhæa.

The abuses of narcotics, saline refrigerants, acids, acid fruits, iodine, and nitre, are causes of impotence, as they reduce the muscular power below the ordinary state. Of all causes, cold is the most powerful. Thus, in the Polar regions, there is neither love nor jealousy.

"The diseases," says Beck, "which we may rationally suppose will prevent cohabitation, are the following:—A mutilation, or severe wounds

of the sexual organs, cancer of the testicles or penis, gangrene of the lower extremities, immoderate evacuations of blood or bile, or of the fæces, scorbutic cachexia, marasmus, peripneumony, and hydrothorax, anasarca in its perfect state, particularly if accompanied with an infiltration into the sexual organs; nervous and malignant fevers, particularly if they affect the brain, and are accompanied with great debility and loss of memory; all affections of the head and spinal marrow, whether from a fall, blow, wound, or poison; or from external causes, as apoplexy, palsy, or other comatose diseases. If the infant is conceived whilst the husband has been known to have laboured under any of these maladies, the presumption is certainly against its legitimacy. So, also, if he be affected with leprosy, venereal ozœna, severe cutaneous disease, or insanity, we may reasonably doubt the fact of cohabitation, from the fear that we may suppose the female has experienced, lest she should be contaminated, or from the dread that she has entertained of having communicated with the individual."

Moral Causes.—There are no facts which so evidently prove the influence of the moral over the physical state of man as the phenomena of erection. A lascivious idea will arise in the midst of our gravest meditations; the virile organ will answer to its appeal, and will become erected, and fit for the function which nature has confided to it; but another thought arising,

will instantaneously extinguish, with the most frigid indifference, all amorous transport.

This statement is well exemplified by the effects of the passions. Chagrin, inquietude, and debilitating passions influence the whole economy; jealousy, and profound meditation, impede the faculty of procreation. Thus, at the very moment when enjoyment is about to be commenced, too eager desire, the excess of love, the fear of not being loved, timidity, respect, doubt of capability, the fear of being surprised, the shame of excessive modesty on being in the presence of witnesses, antipathy, the ecstasy on beholding the attractions of a beloved or fine woman, the continence imposed by real and true love, the sudden knowledge of some physical defect in the female, aversion from filth, odour, and pre-occupations of the mind, are sufficient to oppose erection, and to abate it most suddenly. But who can enumerate all the moral causes capable of impeding or abating erection? A sigh, doubtfully interpreted; a recollection, an equivocal word, are sufficient to destroy the illusion, and congeal the most violent passion. A newly married man has become suddenly impotent on discovering his wife to be without a hymen, though the absence of this membrane is no proof of unchastity; and a debauchee has as suddenly become impotent, on finding the membrane perfect .- (Dict. de Sc. Medicales.) It is thus with a literary man, a philosopher, or all those who have a ruling idea, which excites the brain more than the sex-

ual organs. Nevertheless such individuals are often excessively amorous. Great nervousness, frigidity, a defect in the moral or physical condition, render the act of procreation infecund, and often impossible. The fear of being impotent is by far the most frequent and powerful cause of this condition. Many individuals suppose there is no physical power when the moral state destroys their desires, and they are impotent as long as they suppose themselves so. Such is the power of the moral over the physical state of man. Many impotent persons of this class were cured by Hunter; and many are annually cured by quieting the imagination and strengthening the constitution, as I have also observed in numerous instances. Some persons labour under moral or temporary, and not under physical or persistent impotence, and are cured by invigorating the general health and the genital organs. In remote ages men are said to have allowed the illusions of the imagination to have had a most extraordinary power over their minds and bodies. This was very remarkable in the subject before us. Nero and Amesis are reported to have been rendered impotent by incantations, made at the suggestions of their concubines.

We cannot now easily comprehend how the power of rue, or St. John's wort, could prevent a man properly developed, and in good health, from performing his nuptial duties on his bridal night; or how the pronunciation of

a few obscure and unintelligible words, could have a similar effect. These words were written on paper with the blood of a bat, sewed up with a needle which was used in making the shrouds of the dead, and then the charm was tied round the neck of the newly married man or merely pronounced. To cure this enchantment, the church prescribed prayers, the doctors physic, and the laws severe punishment. Bacon observes in his Natural History, that it was prevalent in Germany and France; and in the latter country it was designated nour l'equillette, or tying the point. Mr. Hunter ordered timid bridegrooms, and those whose impotence was imaginary, to refrain from sexual intercourse for a week, no matter what might be their desires, and then to try their powers. They usually took some mild form of medicine, and a few drops of tincture of opium each night, during the period of preparation. On a future attempt, the mind was not to be pre-occupied, but wholly intent on the act. This plan of treatment was most judicious, and I have tried it in several cases with success. I have also given quinine to improve the appetite and strength.

The accumulation of the seminal fluid for a week generally excites strong desire, while the opium, acting on the brain, changes the train of ideas, and prevents nocturnal emissions, so that at the end of the prescribed period there is no doubt of success. This mode of cure was found effectual, and many of Mr. Hunter's pa-

tients succeeded sufficiently to remove all unfavourable impressions of impotence ever afterwards.

Impotence, natural, manifest, or incidental to woman. It has been long held, I think erroneously, that the generative organs of the human female are more complicated than those of the male, and therefore that the causes of impotence are more numerous and less apparent than in the other sex. If we examine the genital organs of both sexes anatomically, we shall find them equally complicated, and possessing an equal adaptation or arrangement of parts, as well as an identity of structure. Thus we find the structure of the penis very similar to that of the external genital orifice and vagina, the fold of the prepuce, the erectile tissue, the openings of the vesiculæ seminales and uterine tubes, the vesiculæ seminales and uterus, the testes and ovaries, the spermatic cords and the uterine tubes. (See Dr. Quain's Anatomy.) We also find the diseases of one sex as numerous as those of the other: and those who doubt the assertion, need only refer to standard works on diseases of the genito-urinary organs of the male, for ample proof of this position. I need scarcely observe that diseases of the vasa deferentia, vesiculæ seminales, the pressure of tumours, hydatids, &c., on these parts, diseases of the prostate gland, urinary calculi, diseases of the urethra, fistulæ in perineo, diseases of the bladder, penis, and scrotum, will be found as rumerous as those of the generative system of the other sex. (See my work on *Prostitution in London*.) Besides, it would be inconsistent with the wisdom and conformity displayed in all the works of Providence, that one sex should have more organs for the perpetration of the species than the other.

CHAPTER VIII.

CAUSES OF IMPOTENCE IN FEMALES—PROPER TREAT-MENT—INTERESTING CASES—DISEASES OPPOSED TO MARRIAGE—GENERAL PRINCIPLES—LIST OF DRUGS AFFECTING THE GENITAL ORGANS APHRO-DISIACS—VENEREAL ABUSES—TREATMENT OF IM-POTENCE.

THE causes of impotence in women are malformations or diseases of the sexual organs. Some of these causes are apparent, others obscure. The apparent causes are, obliteration of the external sexual organs, both soft and bony, absence of the vagina and uterus, and great deformity of the pelvis, with numerous diseases of the external and internal genitals. The vagina and uterus have been found to consist of a dense, fleshy substance. And the vagina has been partially closed by a similar growth. It may be absent, unusually small, impervious from adhesion, tumours, or a fræmum passing across above the hymen, or it may be filled with a fleshy production. If too narrow, it may be dilated with a bougie, or a sponge tent, and when unattended to, must be divided by incision, to admit of coition, or the passage of the infant.
The orifice may cohere after conception. There is sometimes a great congenital confusion of parts, so much so, that it would be tedious to describe them. In cases of extreme narrowness, impregnation may take place, and the canal be gradually dilated during pregnancy or parturition. I have seen eight cases of cohesion of the labia externa, at the age of puberty, so complete, that only a small probe could be introduced at the commissure. The vaginal canal may be totally or partially obliterated, and in such cases an operation is impracticable, and impotence absolute. The vagina has opened into the bladder (Sue), into rectum, on the anterior parieties of the abdomen, and pregnancy has occurred in the two latter cases. Morgagni attests that of the abdomen, lib. v. epist. 67; and the other is given in the Annales de Med, de Montpellier, which led the celebrated Louis to propose the following question to the casuists: -"An uxore sic disposita uti fas vel non, judicent theologi morales?" Barbaut cites two examples of pregnancy of this kind. (Dict. des Sc. Med., Art. Impuissance.) Orfila contends, such malformation is a cause of impotence; for though coition is not physically impossible, it is contrary to the laws of morals and of nature. The royal court of Treves annulled a marriage in such a case. Dupuytren, and others, have lately described cases in which the infant passed through the rectum, and without laceration of the sphincter ani. Mr. Lawrence introduced his hand into the rectum of a patient in St. Bartholomew's Hospital on one occasion, to extract a phial which had been passed into that bowel. In cases of vesico-vaginal, recto-vaginal fistulæ, and amplification of the vagina from laceration of the perineum, inflammation and ulceration may occur and impede sexual intercourse; but such cases could not warrant a divorce, when they occur after marriage. Excessive straitness, or partial occlusion of the vagina, are not impediments to procreation, as fecundation may occur, if the spermatic fluid be applied inside the external labia, as already mentioned. It is also to be recollected, that fecundation has happened, and the hymen perfect. Prolapsus, and some forms of ulceration of the vagina, are only temporary causes of impotence. Cauliflower tumours of the clitoris or nymphæ may be temporary causes of impotence, as also tumours in the vagina. Leucorrhœa or vaginal discharge is one of the most common causes of temporary sterility.

A remarkable case occurred at the Obstetric Hospital at Turin, of a woman whose external genital aperture was impervious. She appeared to be in labour; a tumour pressed on the perineum, and Professor Rossi was summoned to attend. He distinguished the head of the infant, cut over it, and parturition was speedily completed. He inquired how conception had been accomplished, and he was informed, that the husband, not finding what he desired, took the opposite route. On examination, there was found a congenital recto-vaginal fistula. Dict. des Sciences Medicales. Art. Impuissance.

When recto-vaginal fistula is the result of

disease, and is accompanied by inflammation or ulceration, it is scarcely possible to suppose that coition could be accomplished. M. Marcattended a prostitute affected with recto-vaginal fistula, who continued her mode of life, and became the mother of two infants. He does not state whether the aperture was congenital or accidental. Dr. A. T. Thomson attests a similar fact in his Lectures on Medical Jurisprudence, published in the London Medical and Surgical Journal, 1834 and 1835, vol. vi.

Another remarkable case of impotence is mentioned by Van Swieten, who quotes Benevoli. In this case, the vagina was no larger than a goose-quill, in all its extent. The woman was married, and all the efforts of a vigorous husband were useless. The vagina was scirrhous. Fomentations were employed, and pessaries of different sizes successively introduced, and after some time, the woman was rendered capable

of cohabiting with her husband.

I have attended a similar case, with Mr. Brady, of Blackfriars, in 1837. The vaginal contraction would scarcely admit the point of the finger, and it occurred after a tedious and instrumental delivery. Cohabitation was then impossible, but a cure has since been accomplished.

Fodère relates a case nearly similar to the last. It was that of a girl of sixteen who married, and whose vagina could scarcely admit a goose-quill. She suffered great pain during each menstrual period, accompanied by distension of the womb, and the menses escaped

at the superior part of the aperture. A young and vigorous husband employed his powers in vain, and the medical advisers declared copulation impracticable. Nevertheless, after the lapse of eleven years, the woman became pregnant, though the vagina remained as small as before. It was feared that parturition could not take place; but, after the fifth month of pregnancy, the vagina began to dilate, and, towards the end of the ninth month, allowed the passage of the infant.—Mem. Acad. des Sc. Paris, 1712. Fodère, T. 1.

In such cases the use of bougies, before or after incision, would, in general, effect a cure; and certain theologians decide that the woman

ought to submit to either or both.

In proof of the dilatability of mucous canals, the following case may be cited. It is related by M. Latour, in a medical journal published at Orleans. A peasant, whose wife was sterile, substituted the urethra for the vagina. He dilated the former by mechanical means, progressively employed, until he accomplished his object. The result was incontinence of urine, which led the woman to apply for medical advice, when the cause of her complaint was ascertained.—Marc. op. cit.

I have given the history of a case, which is somewhat similar to the preceding ones, the first part of which will be found in my Manual of Midwifery, p. 512. The woman was affected with vesico-vaginal and recto-vaginal fistuiæ, both of which I succeeded in closing without

any cutting operation. A ligamentous band so diminished the calibre of the vagina, that the top of the fore-finger could be introduced with difficulty. I proposed to incise it, but the patient refused. She returned to her husband, and in a year he succeeded in partially dilating the vagina; but so firm was the band, and so opposed to coition, that he re-opened the vesicovaginal fistula. Inflammation and ulceration followed—a large calculus or stone formed in the opening, which I extracted; sedative injections and other appropriate means were employed; in some time afterwards the health was restored, and the woman became pregnant. Several students saw this patient at the Western Dispensary, Westminster, in 1835. In this case the vagina finally dilated during pregnancy, and there was prolapsus of the bladder during labour, which required the operation of craniotomy. Dr. Ashwell saw this case with me in 1836.

The celebrated Pucelle, Joan of Arc, was examined by two physicians, who found the vagina so contracted, that coition was impracticable. Dr. A. T. Thomson attended a lady, who also had consulted Sir Charles Clarke, for whom various means were employed to allay irritation, and affect dilatation in vain, and she would have applied for a divorce, unless she had been allowed to retain her fortune, which

was considerable.

The whole of the causes of impotence and sterility in women may be arranged under three classes:

1. Those depending on the organs which receive the male fluid, namely, the external genital fissure, the vagina, and uterus.

2. Malformation, or diseases of the organs that transmit it to the ovaries, and convey the embryo to the uterus, and these are the Fallopian or uterine tubes.

3. The malformation, or diseases of the ovaries, or organs which supply the germs for

fecundation.

Inflammation, ulceration, scirrhus, cancer, ossification, calcareous deposit, or tumours in any of these organs, may be the cause of sterility. In fact, any disease of the female genitals, attended with much constitutional disturbance. may be considered a temporary cause of sterility. Tumours of various kinds, callosities, cicatrices, adhesions, from disease or mechanical violence, displacement of the uterus, prolapsus. procidentia, retroversion, antiversion, lateral obliquity, and the various disorganizations incident to muscular, serous, and mucous tissues, when present in the female organs, are causes of infecundity. Among the temporary causes of female impotence, are excessive dimensions of the clitoris and nymphæ; but these are removable by operation.

Some authors are of opinion, that the cavity and outlet of the pelvis may be so deformed, or diminished by soft or bony tumours, as to prevent coition; while others maintain the contrary. When the pelvis is so greatly deformed that the lives of the fœtus and of the mother may be endangered or destroyed during partu-

rition, moralists advise celibacy.

Morgagni relates a case, in which M. Gianella was called to deliver a woman aged forty years, in whom the vagina opened through the anterior wall of the abdomen, and the aperture was dilated to admit the passage of the infant.

In the London Medical and Surgical Journal, 1830, vol. iv. is an account of two singular cases of procidentia uteri; in both of which impregnation was effected through the uterine orifice. though permanently fixed for years several inches external to the genital aperture. been consulted in the case of a woman four months pregnant, whose womb came externally on her assuming the erect position; and I have now another under my care, who is six weeks pregnant. I have also published cases of dysmenorrhæa, or painful menstruation, in which pregnancy occurred. In the disease called irritable uterus, so well described by Gooch and others, a cure may be effected. In the absence of the ovaries and uterine tubes, there can be no conception; or in dropsy, or enlargement of both ovaries, when their whole tissue is diseased; or in occlusion or adhesion of the tubes to the uterus or adjoining parts. There are some cases of constitutional sterility which are inexplicable, unless referable to mental influence; for example, those in which a woman has had no family for years, and at length becomes a mother.

The principal moral causes of female sterili-

ty, are hatred, digust, fear, timidity, an excessive ardour of desire, divers ramblings of the imagination; in a word, passion strongly excited; that is to say, all cerebral action so strong as to diminish that of the genital organs, which require for coition great exaltation. It is well known, that complaisance, tranquillity, silence, and secrecy, are necessary for a prolific coition; it is arrested, as if by enchantment, by noise, dread, fear, publicity, jealousy, contempt, repugnance, slovenliness, by too much respect, and by everything that can excite or depress imagination. Most of the causes of impotence in both sexes may undoubtedly be removed, but some of them are entirely beyond the reach of art.

Excessive venery is a common cause of sterility in women. The debility of the uterine system by promiscuous and too frequent intercourse, is the cause of infecundity in prostitutes and others. But when these persons reform and marry, and confine themselves to one individual, the uterus gradually regains its power, and conception occurs often. Many proofs of this were given by prostitutes, who were transported to Van Dieman's Land, and there

became mothers.

The constitution may undergo changes favourable to fecundity. Thus we often see women who bear children, after having been barren for ten or twenty years. Others have a family without experiencing any enjoyment, according to their account, during intercourse; and some who suffer the embraces of their husbands with pain or even disgust.

Besides the numerous diseases of the genital organs which are absolutely opposed to mar-

riage, the following must be included:-

1. The different degrees of imbecility or fatuity, although this state may not be absolute; mania, even with long lucid intervals, which may induce a husband to lay violent hands on his wife or infants, or even murder them.

2. Epilepsy, which has continued after puberty, and has not yielded to medicines. This disease is often caused as well as aggravated by sexual pleasure, and may end in mania, or in idiocy, or apoplexy; it not only passes from generation to generation, but may be excited in others by terror, or by intimidation in schools.

3. Hæmoptysis, or spitting of blood, certain diseases of the heart, and consumption, are aggravated by venery; and those affected with the latter disease are much inclined to this pleasure, as if nature wished to continue the species be-

fore the destruction of the parent.

4. Syphylis, scrofula, and leprosy, which may

be transmitted to offspring.

When persons have no sexual desire, or when there are physical defects of their organs which cannot be remedied by surgical operation, they commit a great moral offence on entering into the marriage state, by depriving another individual of those conjugal rights which nature has established.

From the numerous statements in the works

now referred to, we may, I think, deduce the

following general principles :-

First. To declare either sex impotent, it is necessary that certain physical causes be permanent malformations, or accidental lesions, and be evident to our senses, which art cannot remedy, and which prevent the faculty of exercising a fecundating coition.

Secondly. These causes, when rigorously ex-

amined, are few in number.

Thirdly. The moral causes of impotence ought not to be taken into consideration, unless with due caution, as they would serve as an excuse for an individual accused of impotence.

Fourthly. That if there is the slightest penetration into the vagina, it is sufficient to excite in the other sex a degree of erethism or excitement necessary to fecundation; or if the spermatic fluid is applied at the entrance of the vagina, virile impotence cannot be admitted.

In this country, the medical witness is now seldom required to decide questions of impotence or sterility in our courts of justice; but every medical practitioner may be consulted in private practice, either before or after matrimonial engagements. He may therefore be the cause of great domestic trouble, and may embitter the life of male or female. He should be exceedingly cautious in fixing the stigma of impotence or sterility on either party. In other cases, the legitimacy of children may be contested on a plea of impotence, and such a plea may be offered by a man accused of a rape. It

is therefore evident that a proper knowledge of the subject is necessary to the medical practitioner, the lawyer, the juror, as well as to every

class of the community.

Ambiguity of Sex .- Hermaphrodites .- There may be malformation of the genitals in both sexes, but there is no example on record of one individual possessing both perfect male and female organs. Again, the organs may not resemble those of either sex. There is no truth in the ancient statements, that hermaphrodites have married and propagated, for the scientific obstetrician is aware of the physical impossibility of a full-grown infant passing through the male pelvis. It is evident that hermaphrodites, whose organs are defective, must be impotent and sterile. Some of the ancients were of opinion that such persons might propagate; even a canonist went so far as to maintain, that one individual could propagate within himself or herself-"tanquam mas generare ex alio, et tanquam fæmina generare in se ipsa." There is no case on record, so far as my researches enable me to state, of a perfect hermaphrodite, and no truth whatever in the assertion that such a class of beings can propagate the human species. It is true, however, that hermaphrodite plants possess the power of reproduction.

I can see no difficulty whatever in supposing that persons of both sexes, even with great malformation of the genital organs, may marry, as many may do, when I recollect the curious and well-attested case of a female who dressed in male attire, and assumed the name of James Allen, married another female, and lived as a husband for several years without detection. The case happened in London in 1829, and was discovered when Allen died; and on exposing the body in Guy's Hospital, it was found to be that of a well formed female. Allen was a husband for eleven years without suspicion or detection. I know a clergyman of the established church, whose wife was previously married for five years without consummation, or any attempt at, having been made during the period.

Blackstone says, "a monster having deformity in any part of its body, yet if it hath human shape, may inherit; and every heir is male or female, or hermaphrodite; that is, both male and female; and shall be heir according to that kind of sex which doth prevail, and accordingly it ought to be baptized. The same is observed in cases concerning tenants by courtesy. Such individuals cannot be admitted into holy orders,

or become judges."

It is worthy of remark, that, until the commencement of the eighteenth century, it was believed, and by some very eminent medical authors, that monsters were formed by a demon. (Licetus, in his Treatise on Monsters, 1616.) Riolan, one of the most distinguished writers of the seventeenth century, was also of this opinion:—"As to monsters made after the image of the devil, if allowed to live, they ought to be confined in a close dark chamber. In fine, those who are half human and half animal,

they ought to be put to death. This was also the law of the Twelve Tables at Rome, and even of the Athenians. It is scarcely necessary to remark, that there never was, nor never can be, a body "half human and half animal." It is a physical impossibility. Even the celebrated Ambrose Parè considered that the birth of a monster was the sign of some approaching misfortune. These writers knew nothing of Teratology, which treats of the arrest, retardment, or excess of development, so luminously described by the illustrious M. Isodore Geoffroy Saint Hilaire; and which clearly proves that monsters, or deformed animals, are to be ascribed to natural causes.

As the brain is generally perfect in monsters, and the mind sound, it is clear that such persons ought to inherit property. When two perfect bodies are united at the chest or back, such as the Siamese twins and Hungarian sisters:

Non duo sunt, sed forma duplex; nec fœmina dici, Nec puer ut possit, neutrumque et utrumque videtur. Ovid.

Treatment of Impotence.—The treatment of impotence must vary according to the causes of the disease. Every cause, both moral and physical, requires a modification of treatment, and there is no single remedy, or combination of remedies, which can remove all the causes of this distressing malady. The indications of treatment are—1. To remove or remedy physical defects; 2. To strengthen the system when

there is atony or debility; 3. To regulate the whole functions when deranged; 4. To excite or diminish, by proper means, the action of the genital apparatus; and 5. To tranquillize the

imagination and mind.

When impotence is caused by moral or physical irritation, as that induced by opiates, cantharides, &c., refrigerants, aperients, low diet, exercise, and the abstraction of the imagination from reflecting on all objects capable of exciting amorous impulse, are the best means to be employed. Exercise in the open air, and constant attention to business, are highly useful in the cure. Idleness and luxuriousness ought to be carefully avoided.

Otia si tollas, periere Cupidinis arcus.—Ovid.

When there is want of power in the genital organs, the cold bath, invigorating diet, and a moderate use of wine and spirituous liquors, is necessary. It is likewise supposed that fomentations of certain aromatic herbs, and dashing cold water over the genitals, strengthen these organs. Frictions on the loins, inside of the thighs, with stimulating liniments, galvanism and electricity applied to these parts, are considered valuable remedies. M. Mazard cured several impotent persons by means of electricity, whose disease was induced by a shameful vice, in which they indulged alone, or by excess with women. Some of these had involuntary emissions, and gleets after gonorrhæa, and all were not only cured, but fell into flesh and enjoyed excellent health and virile power. He employed the electricity, and elicited sparks from the perineum, spinal marrow, and sacrum, and directed the electric fluid through these parts. Others have advised urtication, flagellation, and friction.

If the disease is caused by excess of enjoyment, abstinence, with a milk and vegetable

diet, are the best remedies.

When it arises from moral causes, as timidity, respect, disgust, antipathy, &c., the cure is entirely to be effected by moral resources and the removal of the causes.

Should the disease depend upon want of proper development at puberty, every means of improving the general health ought to be em-

ployed.

If old age be the cause, there is no remedy. The loss of both testicles renders sterility ab-

solute, permanent, and incurable.

The resources of art may often correct vicious conformations of the sexual organs, and the operations must be varied according to the nature of the malformation or disease. These

have been described in preceding pages.

Having now enumerated the different causes of impotence, and the general principles of treatment, it must be manifest that the remedial means for combatting the disease, must be numerous and varied. There is, nevertheless, a class of medicines which particularly influence the functions of the genital organs. These medicines, where they excite the organs, are

denominated spermatopia and aphrodisiac, and when they weaken or moderate the activity of the genital organs, they are called hypnotics.

In the first class are included tonics, aromatics, odoriferous gums, balsams, resins, essential and volatile oils, perfumes, musk, phosphorous, opium combined with aromatics; and among the second, are camphor, nitrate of potass, neutral salts, agnus castus, nymphæa, &c., diuretics and emmenagogues. Cullen was of opinion that there were no aphrodisiac remedies, but later writers maintain that there are several.

Cantharides have long had the preference of all known aphrodisiac remedies. They form the chief ingredients in the Venetian lozenges and amorous philters prepared in Turkey and in Italy. But the incautious use of this medicine produces stranguary, inflammation of the bladder, ureters, and kidneys, and often death; though when properly employed, there is no doubt of its aphrodisiac effect. Chaumenton was consulted by many young libertines, who, contrary to his advice, continued to use freely this remedy, and who afterwards terminated their existence amidst a thousand torments. (Dict. des Sciences Medicales, Art. Aphrodisiaque.) Weickard states that he roused the genital organs of a man nearly eighty with musk. (Chaumenton, op. cit.)

Ambergris and musk have also a special action on the genital organs. Borelli (Gent. 2.) says he knew a man who rubbed the virile member with musk before intercourse, and re-

mained so united to his wife, that it was necessary to use lavements to separate them. This case is, in my opinion, totally unworthy of credit, more especially when we recollect the dila-

tability of the vagina.

"Borelli dit avoir connu un homme qui se frotta de membre viril de musc avant le coit, il l'exerca et resta uni a sa femme, comme les chiens le sont à leur femelles. Il fallut lui donner quantite des lavemens; afin de ramollir les parties, et obtenir la separation des deux individus."

Another very dangerous medicine is phosphorus, which acts as a most violent poison. It was dissolved in ether, in the proportion of half a grain to forty of the latter, in a proper vehi-cle. This remedy is highly dangerous, but is now introduced into the London Pharmacopœia, 1836. When used incautiously, it has been observed to produce the most rapid and painful death. M. Magendie dissolves it in oil in the following proportions:—phosphorus, 3j; oil of sweet almonds, 3ij; dose, ny xx—xxx in an emulsive mixture. In the last work, the dose of diluted phosphoric acid is my xx-3j.: opium combined with musk, amber, and other aromatics form the remedy of magnanimity of Komper, its inventor. It is very much employed in eastern nations, and is said to cause a delicious intoxication which vividly excites the pleasures of love; but in a few hours afterwards is succeeded by timidity and sadness; and the habitual use of it induces debility, stupor, and

precocious old age. Saffron, oil of worms, of palma christa, of ants, the root of the satyrion, sarrasina, &c., have also been lauded, but found inefficacious.

It is stated in the Mem. de la Soc. Roy. Med., 1776, that the corn called sarrazin, which is the aliment of the people of Sologne, excites such lechery that children of seven and eight years old have commerce together, and that the women are still more salacious and very fecund.

Many alimentary substances excite the genital organs, and their effects will vary according to peculiarity of constitution. Among these are animal jellies, eggs, oysters, and other crustacea; crabs, mushrooms, truffles; farinaceous substances, generous wines, a moderate use of

ardent liquors, fish, &c.

Some persons have their amorous propensities excited by wine, others by dilute spirit, more by eggs, oysters, and even milk. The moderate use of spirituous drinks, of wine, cider, &c., contributes to fecundity, although there abuse is extremely pernicious. Credulous authors of former times were of opinion that among the best aphrodisiacs are the menstrual evacuation, (I attended a labourer who took a few drops of the uterine secretion in porter. I mention the details of his case in my Manual of Midwifery,) human sperm, (Turnbull informs us, in his voyage round the world, 1807, that some of the inhabitants of the Island of Othaheite were reduced to the effeminacy of women. They had recource to a method of cure which I

must describe in the Latin language.-" Penem adrigentum aliorum virorum exsugunt, ita ut in ejaculatione, semen avide deglutiant. Putant enim, per hanc spermatis, absorptionem, robur virile, vigoremque sexûs quo privati sunt, reci-pere"—that of the stag, the hedge-hog in heat, of the vulva of the sow, of the uterus of the hyena, wolf, &c. Those who desire more extended details may consult the Memoir of M. Virey, in the Bulletin de Pharmacie, 1813.

Hypnotics repress amorous impulse, such as nenuphar, agnus castus, camphor, and nitrate of potass. These were strongly recommended by religious persons who wished to mortify the flesh. It was an axiom at the School of Saler-

num,

Camphora per nares castrat odore mares."

The application of these and the oleraceous plants, to the genital organs, are said to produce

a complete inertness and eunuchism.

In fine, the best means for curing impotence, are to remove its causes, to avoid excesses, to calm an alarmed imagination, to repair enfecbled powers. Instead of having recourse to aphrodisiac medicines, we first improve digestion, and advise a nutritious diet, fresh animal food, jellies, milk, eggs, &c.; wine, spirituous liquors in moderation, coffee, chocolate, cocoa, and aromatics.

When the disease depends upon the imagination, which is most generally the case with young persons who have abused the generative function by vicious practices, or in the natural way, but whose organs are properly developed, a nutritious diet, with a judicious use of aphrodisiac remedies, will in most cases effect a cure.

I have given a full account of venereal abuses in relation to health, reproduction, and disease,of the numerous local and general diseases in the head, chest, lungs, heart, abdomen, stomach, liver, intestines, and other parts of the body, illustrated by original engravings, in another work, to which I must refer the reader, *Prosti*tution in London, Paris, and New York,* as illustrative of the capitals and large towns of all countries, with an account of the nature of the reproductive function. I shall therefore notice this numerous class of diseases in the following pages very superficially, and merely allude to those of most frequent occurrence, such as syphilis, gonorrhea, stricture, diseases of the prostate gland, bladder, ureters, kidneys, of which nothing new can be stated.

^{*} Now in press.

CHAPTER IX.

OF THE SYMPTOMS AND TREATMENT OF GONORRHŒA, (OR CLAP,) GLEET, STRICTURE, IRRITABLE BLAD-DER, SWELLED TESTICLE, ETC. ETC.—DR. SKEY'S DIRECTIONS FOR CURE—INTERESTING CASES, ETC.

VENEREAL intercourse is occasionally impure; and there are animal poisons generated and communicated by this intercourse, of a peculiarly malignant character. One is the poison of Gonorrhaa (the disease vulgarly termed Clap), which falling upon the mucous membrane of the urethra, produces from that surface, a discharge of infectious matter; the other or the poison of Syphilis, being applied to the surface of the skin, or (as far as is known at present), to any surface, produces local inflammation and ulceration; forming a sore which is called a *Chancre*. The discharge from this, being received into the absorbent glands occasions swellings, which have been named Bubo, and from the transmission of the poison into the circulation, there arise respectively, inflammation and ulceration in the throat, on the skin, in the membrane investing the bones, and even in those solid bodies themselves.

If a healthy individual have sexual intercourse

with another, labouring under chronic mucous discharge as the result of gonorrheal inflammation, infection, though not absolutely certain, is most likely to arise, but no certain rule can be laid down with regard to the time that a clap will take before it makes its appearance, after infection has been conveyed. In some instances, three or four days elapse, in others, there will not be the least appearance of irritation before the expiration of ten or even fourteen days. Most commonly, however, the disease is perceptible in the space of from six to twelve days. In the male, it commences with a sense of uneasiness, or tingling about the extremity of the penis; often a thrilling sensation, not of an unpleasant character, and nearly allied to the venereal œstrum; presently this is exchanged for itching and soreness, and then a drop of fluid escaping without effort, the attention is called to the part; and it is found, that the lips of the urethra are swollen and inflamed; a whitish, glutinous, and nearly transparent fluid, exuding from its orifice. At first, the discharge from the passage is mucous; but afterwards it assumes a decidedly purulent appearance, that is, resembling "matter." This becomes yellow, or, if the inflammatory symptoms run high, green; and it is often intermixed and streaked with blood. I say resembling matter, for the fact is, that even in these aggravated cases, the discharge contains little beyond the altered mucous secretion of the part. The time this augmented diseased secretion will continue to discharge, is quite indefinite. Some people assert it will wear itself out; one thing is certain, it will sooner wear out the sufferer; besides, the doctrine is dangerous, inasmuch as it overlooks the permanent consequences of a disease, supposed to pass away. Thickening of the mucous membrane of the urinary canal, is one of the consequences of long protracted and neglected clap, and this state of parts lays the foundation, if not identical, with Stricture. Or the discharge may cease to present its usual characters, and leave a surface, prone to the secretion of a thin, ichorous fluid, termed GLEET.

It is obvious, then, that no folly can be greater than that of suffering this disease to end as many others are apt to do, by terminating in another; and that other, often of a permanently incurable Besides these effects on the urethra, character. gonorrhœa takes a course internally. It does not confine itself to the lips of the urethra, but often produces an erysipelatous inflammation and swelling of the glands and foreskin; occasioning effusion, and the formation of the diseases termed Phymosis and Paraphymosis, in the former of which, the foreskin cannot be drawn back to cover the end of the penis; in the latter, the prepuce forming a tight ring at the back of of the gland, cannot again be brought forward; the pain and strangulation in this state of parts are excessive, and demand prompt surgical interference. The glands of the groin often become affected from sympathy. I say from sympathy, in contradistinction to that swollen state of the

inguinal glands, resulting from the transmission of syphilitic matter; as occurs in the aggravated forms of venereal disease. In the first instance the glands swell, but not the same range of glands as are liable to be affected with syphilitic Bubo; and there is also this distinction—that while in the latter case they almost invariably burst, the gland that is sympathetically inflamed during the progress of gonorrhæa, never or very

rarely inflames to suppuration.

Where this effect takes place from gonorrhea, several glands of the groin are apt to be affected in succession; whereas in the absorption of the poison of syphilis, a single gland only is enlarged on each side. In the course of the disease, swelling and suppuration often takes place in the mouths of those lacuna, which, like dilated pouches, are situated chiefly near the extremity of the canal. Matter becomes accumulated there, and this place appears to constitute the last entrenchment of the diseased action. Irritation and inflammation occur also in the spongy bodies, forming the bulk of the penis, thus constituting that painful affection termed Chordee, in which the penis becomes partly erect, and feels as if curved or bound down, so as to prevent its complete extension. This, of course, is a temporary though intensely agonising predicament, and generally takes place in the night, accompanied with great pain, preventing the patient sleeping. When the parts are not occupied with much inflammation, few or none of the last symptoms will appear, and only a discharge of specific character, with a slight heat or scalding in making water, will prevail. The sensation of scalding varies in intensity in different individuals, and frequently abates or passes off altogether where the discharge has become established. Generally, from the adjacent parts sympathising with those already affected, the patient feels a sensation of uneasiness, and dragging down about the thighs and fundament. One of the most painful consequences arising in the course of gonorrhæa, is

the occurrence of Swelled Testicle.

From the statements afforded in the anatomical section of this work, it will be seen there is a true continuity of mucous surface, from the urethra along the cord to the testicles, and it is along this surface that gonorrheal inflammation occasionally creeps, giving rise to horribly painful enlargement of one or both of these organs. The testicle is enveloped in a dense fibrous capsule, which does not generally yield to distension; hence, the pain, when enlargement is produced by inflammatory action. In consequence of this, there will be excruciating agony extending into the small of the back, heat, restlestness, and symptomatic fever; a furred tongue. thirst, quick pulse, and great depression of the vital energies. It not unfrequently happens that the swollen testicle suppurates and bursts; and whether this occur or no, it is certain that on the subsidence of disease, its functions as a secretory gland in the production and elimination of the seminal fluid, are by no means enhanced by all this mischief. But of all the consequences of gonorrhœa which tell most fatally upon the comfort of married life, and interfere most decidedly with the procreative energies, the forma-tion of Stricture is most to be dreaded. Spasmodic stricture, occurs during the progress of clap, and is produced by temporary spasm of the muscles surrounding the membranous portion of the urinary canal. Inflammatory stricture generally succeeds acute gonorrhæa, and consists in the effusion of adhesive matter around the canal; while permanent stricture is the result of thickening of the urethra, and consequent narrowing of the canal from a slow inflammatory process. There are many causes of permanent stricture besides gonorrheal inflammation, and while speaking of this, it will be well to enumerate them. No one is more frequent than excessive prolongation in venereal intercourse. Its constant effect, is the exhaustion of the energy of the muscular fibres; thus they are thrown into irregular action, and permanent contraction of some part of the passage is thereby induced. Indeed, so strong is the effect, that symptoms of spasmodic stricture have been known to arise in some patients, after every repetition of vene-real intercourse, especially, if due time for repose have not been afforded for the secretory organs; and though these symptoms at first were found on examination not to be the effect of permanent stricture, yet this was generally produced in the end, and proved most troublesome in its removal.

Masturbation in this way, produces the same or worse effects than severe venereal effort. Spasmodic Stricture, then, or that too violent excitement of the muscles around the neck of the bladder, whether arising from self-pollution, venercal excesses, or inflammation of mismanaged or neglected clap, may, and often does terminate in permanent constriction of the urinary canal. At the commencement of the formation of permanent stricture, the surgeon is made acquainted with the real nature of the complaint by the following indications: - The first, is the retention of a few drops of urine in the urethra, after the whole appears to have been discharged. The patient, although the stream of urine may be somewhat diminished, feels no particular uneasiness until he perceive some difficulty in its expulsion. The effort is greater than usual, and a straining continues, even after the bladder is emptied. Occasional irregularities from cold, indulgence in drink, or change of weather, and even very trifling causes, are sufficient to cause the urine to pass only by drops, or for a time to be totally obstructed. The bladder in the progress of this disease becomes irritable; this is evinced by the person not being able to sleep so long as usual without rising to effect the urinary discharge. A man in health will sleep for seven, eight, or nine hours without being obliged to empty his bladder; but if he labour under stricture, he cannot continue for a longer period than four or five hours, and frequently much less than this. A patient of mine, who occasionally (but not often) gets tipsy over-night, invariably sends for my aid to pass the catheter the next morning; the man is the subject of stricture, and frequently rises in the night to evacuate his bladder; when under the influence of intoxicating fluids, he sleeps, insensible to the stimulus of an irritable yet distending bladder; and the result on waking is complete powerlessness to effect its ordinary discharge. The next circumstance observable in the progress of Permanent Stricture, is the forked division of the urinary stream, the reason of which is deducible from the uneven, irregular, and swollen, as well as contracted state of the urethra. The urine cannot be ejected to the usual and natural distance, although the patient be sensible of the bladder making more than usual exertions. Sometimes it assumes a spiral or twisted direction. Even the thread-like stream, conspicuous in the advanced stage of stricture, often gives place to a discharge by mere drops, attended with the strongest efforts and most excruciating pain. The coats of the bladder become enormously thickened; there is dilation behind the place where the stricture occurs, (which is commonly the membranous portion of the urethra anterior to the prostate gland;) the ureters, or canals. leading from the kidneys to the bladder, become distended and dilated, and the kidneys themselves, the secretory organs of the urine, become diseased. Many of these appearances are attributable to the existence of a physical imped-iment, a narrowing, or STRICTURE of a portion of the urinary canal,—and if viewed in connection with the obligations of marriage, are most grave in their consequences.

GLEET is one of the sequelæ of Clap, and is often exceedingly difficult of removal, sometimes continuing for years. The discharge becomes chronic, its character is altered; and from being purulent, it is now semi-transparent. Its persistence mostly depends on the co-existence of stricture in some portion of the canal. The term "Gonorrhea," is derivable from the Greek, and signifies literally a flow of seed; the earlier writers mistaking the mucous discharge occurring in clap, for the all-important seminal fluid. "Blennorrhagia," a flow of mucus, is the more correct classical nomenclature, synonymous with the "chaud-pisse," hot-urine of the French, or "clap" of the vernacular English. Timœus relates that a young law student, the victim of selfpollution, was "seized with a gonorrhea, accompanied with a weakness of the whole body." He observes, "I looked upon the gonorrhæa as a sequel of the relaxation of the seminal vessels," and truly his reasoning was correct; but as to the discharge, termed by him, "gonorrhea," it was neither the involuntary escape of semen, nor the infectious matter, correctly indicating the existence of clap; but a gleety discharge from the prostate, vesicula seminales, and urethral surface, certainly very analogous in character to the chronic effusion supervening on stricture from neglected clap.

There is an exceedingly distressing affection frequently resulting from gonorrhea, and therefore fitly to be introduced in this place, named by surgeons Irritable Bladder. I say frequently arising in this way, but it may also proceed from certain solitary practices; in fact, it is closely identified with all the habits of Sensualism. The patient is annoyed with a frequent desire to void his urine, and this symptom becomes ultimately so urgent, that the inclination to empty the bladder occurs as often as every ten or fifteen minutes. The pain experienced is in exact ratio with the distension of the bladder, and sometimes the urine is discharged mixed with blood. Irritable bladder is a dreadful disorder, the patient's life is a burden to him; he is obliged to keep from society, and linger away his hours in solitude. The late Sir Astley Cooper relates the case of a young gentleman, who, being in company with a party of ladies, was about to leave them for the purpose of making water, having at the moment a strong desire; in the greatest agony he rode with them some miles, when endeavouring at the end of his journey to evacuate his bladder, to his utter astonishment, he could not pass a drop; a surgeon was sent for, who took away the urine by means of a catheter, but from suppuration supervening upon irritable bladder, he shortly died from exhaustion. Next to those cases which have occurred in connection with gonorrheal inflammation, the most frequent instances of this irritable condition of the organ occur, as the result of excessive venereal indulgence in advanced life, or self-

pollution in youth.

In reference to the treatment of gonorrheal affections, little need be added. The most important remark I have to offer, relates to the necessity of the avoidance of its mismanagement. The deplorable results of this form of venereal disease just recited, are easily averted by common care and prudence; but from negligence, or in the hands of unskilful surgeons, the most calamitous consequences not unfrequently arise .-Among the most common of those causes which precipitate these secondary diseases, may be enumerated the use, or rather the abuse of Mercury, (which by unanimous consent has long been banished from the scientific treatment of gonorrhæa,) the employment of stimulant resins, as Turpentine, Cubebs, or the Balsam of Copaiba, before the subsidence of the inflammatory or acute stage; but principally the mismanagement of astringent or irritating Injections. These, however useful and necessary in the chronic stage of complaint, undoubtedly tend, by destroying the discharge, to fix the specific diseased action upon the testicles, producing inflammation and enlargement, nay, frequently disorganization there,-consequences far more to be dreaded than the original mischief; for it must carefully be noted, that to arrest the flow of morbid mucus, is not to cure the disease. Inflammation of a specific kind in this instance relieves itself, or terminates in the discharge of a peculiar secretion from the inflamed surface; and it is only by changing or destroying that diseased action of vessels, which produces the discharge, that a cure can rationally be expected to be effected. Gonorrhæa attains its crisis more uninterruptedly in a full than in a languid habit; but extremes of both are sources of aggravation, the first as regards intensity, the second as re-

gards time.

The science of surgery affords no means by which a confirmed clap can be suddenly arrested in its career; and the attempt, if made, is frequently productive of evil results. The treatment will necessarily be modified by the date, the intensity of the disease, and the constitutional peculiarities of the subject; and hence, though most of the remedies be well known, yet in their application they require that discrimination. which renders it exceedingly unwise and unsafe, that a man should venture to treat his own case; and the records of our practice attest much serious mischief that has arisen in this way. For a period of two or three weeks the disease should be strictly palliative, the diet should be moderately reduced, the bowels relaxed, but not violently irritated by drastic purgatives, the local inflammation mitigated by frequent fomentation and rest. The smarting which occurs in evacuting the bladder, arises not from any change in the chemical constituents of the urine, but from the circumstances of its having to pass over an inflamed and highly sensitive surface; so when the eye is inflamed, light, which constitutes its natural stimulus, becomes intolerable. This smarting may be much alleviated by taking about thirty drops of the solution of potass three times a day, (which neutralizes the acid the urine naturally contains,) combined with a few drops of tincture of opium; besides which mucilaginous and diluent drinks certainly render the urine less stimulating. The activity of the disease being exhausted, and the acute stage of inflammatory excitement subsiding under judicious management, the improvement will be indicated by a diminution of pain in making water, and in the quantity of discharge; which becomes paler in colour, and

more watery in consistence.

In order to effect these salutary changes, there is no necessity for the administration of Mercury, as was once the practice. Formerly it was thought, that there is a set of constitutional symptoms supervening upon the local disease; (in the same way as venereal sore throat follows neglected syphilitic chancres;) that gouorrhæa constituted only a variety of syphilitic disease, and that mercury was absolutely necessary for its cure in every form. Modern science has, however, dispelled this illusion; there are some accidental complications, but no distinctly regular secondary symptoms resulting from gonorrhea. The first stage then being past, the treatment should undergo a corresponding change, otherwise the disease will pass into Gleet, and become tediously protracted. Should Chordee, of which we have spoken, interrupt the healthy progress of the case, in all probability the cure will be more or less delayed, inasmuch as this painful symptom indicates a hitherto uncontrolled inflammation of the urinary canal, extending to the spongy tissue forming the body of the penis. Chordee is not a common symptom of clap in its early stage, and mostly gives way to a combination of calomel and opium, the abstraction of blood from the arm, and the warm bath.—With some, the local application of cold answers better.

The general treatment of gleet consists in the administration of large and still larger doses of internal stimuli; of which those in most frequent use are Turpentine, the resinous balsams of Chio or Copaiba, and Cubeb Pepper, and of local injections of Alum, the Sulphates of Zinc or Copper, and Nitrate of Silver. The Zinc is used in the proportion of from three to five grains to the ounce of water, and each of the other salts in proportion. On these failing, the strength of the solution is increased indefinitely, often extending to eight or ten grains to the ounce .-Mere increase of potency in these applications is not the secret of their success. Violence is inadmissible in good surgery. By giving tone to the weakened vessels, by watching patiently the result of the action of remedies of moderate power, by persevering appeals to change the diseased habit of parts, the vessels will gradually assume a healthier action, and the discharge will entirely subside. Instead of using a strong injection night and morning, the introduction of a weak solution every third or fourth hour, will

frequently succeed, and if it do not, no aggravation ensues.

Gonorrhæa, if neglected or improperly treated, becomes chronic gleet, and in this state is infectious equally with the acuter disorder; if, however, the discharge be kept up solely from the existence of stricture, it is not necessarily communicable. Under any circumstances, so long as there is the least appearance of discharge, a matrimonial union is unadvisable, and correct surgical advice and treatment imperatively neces-

sary.

As to the treatment of Stricture, there are three indications in its cure; one to produce the requisite physical dilatation of the constricted canal; another method is the attempt to produce absorption of the thickened organized lymph surrounding the urethra; and a third, is the mechanical destruction of the Stricture. Elastic or solid instruments cautiously introduced, will often effect the original dilatation; medicine will sometimes succeed in promoting the cure by absorption; and destructive caustic will form a new passage through the thickened parts when less powerful agencies have failed. It is certain that these means are strictly surgical, and perhaps in the whole round of operative science, there is nothing demanding a more minute acquaintance with the unseen anatomy of the parts, than the treatment of Stricture; none, in which blundering rashness or ignorance, may effect more deplorable mischief. The bougie or catheter may be forced into the bulb of the urethra, or tear its way into the substance of the prostate gland; and death may ensue from unrelieved distension of the bladder, and the irritation supervening upon the injury. The use of caustic has been much abused, and indeed ought never to be employed, except in those extreme cases which surgical discrimination alone can detect

and justify.

All the diseases of this unhappy class are of a complicated and varied nature; they embrace in their consequences so many painful diseases, that I never consider them, however slight in appearance, as mere local effects, but always dread their approach to a constitutional character; for by a deplorable fatality, to which limit is unknown, the most trivial cases of these diseases become the fruitful mine of a thousand discordant feelings and symptoms, that harass their devoted victim for an indefinite period: therefore I strongly recommend, in all cases, a minute investigation, in order that the remedies may be effective on their onset; the choice of which remedies must be governed by the symptoms, constitution, and habits of the patient; bearing in mind, that, in diseases of this kind, large evacuations of any character, are to be carefully guarded against: for in all cases they have done injury, by producing either irritability of the stomach or the bowels, and thus rendering the system unequal to the retention of the necessary remedies.

Let not non-medical readers imagine, that the foregoing sketch of gonorrhead disease and its

consequences, is intended to place the method of cure within their own grasp. Let such an one apply for medical aid on the first outbreak of suspicious symptoms; and by so doing he will save himself a world of anxiety, arising from the fear of going wrong in the adoption of the curative plan of treatment. In fact, all that relates to the management of the consequences of gonorrheal inflammation—as for instance, gleet, stricture, swelled testicle, and other obscure, yet painful affections of the urinary organs, is strictly surgical—the definition of those principles could little avail the general reader, whose interest is best consulted by referring him directly and at once, not to books, which could only confuse a mind ignorant of anatomical matters, but to that practitioner who has made sexual diseases his exclusive study.

The following excellent remarks on the treatment of Gonorrhea are from "a Practical Treatise on the Venereal Disease," by F. C. Skey,

F. R. S. (London, 1841.):—

"The treatment of gonorrhea will be modified by the date—by the intensity of the disease—and by the constitution of the subject. To take the disease in its earliest stage, as the first subject of consideration, we may treat it on the principle of escharotics to certain forms of sore. But this will only apply to the very early stage, before either painful micturition or purulent discharge is established. It is applicable, therefore, to cases in which gonorrhea may be expected, rather than those in which it exists.

This treatment, which is powerfully repellent, consists in the recourse to the most positive stimulants, which may be applied both locally and internally. As injections, we may employ from three to five grains of sulphate of copper to an ounce of water, or ten grains of sulphate of zinc to the ounce. This should be injected every two or three hours; while a dram of cubebs pepper, or thirty drops of copaiba balsam, and the same quantity of turpentine, may be taken in a strong decoction of lignum vitæ, or even in water, three times during the day.

"By these means the disease is diverted from its natural course, and its career may be destroyed; but it is dangerous practice, and should not be resorted to, except in cases of emergency. Swelled testicle is a frequent result; and the discharge which may temporarily yield under a smart attack of orchitis, will return at the expiration of many days. I apprehend that this treatment by revulsion, can never be warrantable but in the very 'earliest appearance of the discharge, probably within twenty-four hours.

"Gonorrheea attains its natural crisis more uninterruptedly in a moderately full than in a languid habit, but extremes of both, are sources of aggravation; the first as regards intensity—the second, time. I am not aware that the science of surgery affords any means, by which a confirmed clap can be suddenly arrested in its career; and the attempt, if made, is not productive of any but an evil result.

"For a period of two or three weeks he

treatment should be strictly palliative; the diet should be moderately reduced; the bowels relaxed, but not considerably; the local inflammation mitigated by frequent fomentation and rest; and under circumstances of great activity, combined with great physical power, and a full and hard pulse, sixteen ounces of blood may be abstracted early. The painful micturition may be relieved by thirty drops of liquor potasse, combined with five or six of tincture of opium, three times during the day. I find advantage from the following form, to be taken every night in milk:

Pulv. Jalapæ, gr. x.; Pulv. Acaciæ, 3ij.
"Perseverance in these measures during a fortnight, will exhaust the activity of the disease; the improvement will be indicated by a diminution of pain in making water, as also diminution of the quantity of the discharge, which becomes paler in colour, and more aqueous in consistence. Sometimes on the contrary it continues thick and ropy to its last stage. As soon as this stage is accomplished, the treatment should undergo a corresponding change, otherwise the disease will become protracted under the form of gleet. The diet may be improved, and the laxative omitted altogether; a moderate quantity of wine is not undesirable, if the person be accustomed to that, or similar stimuli, while in health.

"Should the healthy career of the case be interrupted by chordee, in all probability the cure will be more or less protracted, because its presence indicates a hitherto uncontrolled inflammation of the urethra, which has extended to the erectile tissue of the corpus spongiosum. This condition of that body is not always perceptible on examination, but it usually leaves considerable soreness along the track of the canal. After chordee has existed for some time, we can often perceive (by the finger) the presence of lymph, poured out around the urethra, chiefly in the region of the scrotum, where it presents one or more indurated masses of a roundish form, to which, more especially, the pain is referred during erection. swellings become sufficiently large to compress the urethra, and present considerable difficulty both to the flow of the urine, and to the introduction of instruments towards the bladder.

"Chordee is not a common symptom of gonorrhea in its early stage; and is, I think, more frequently asthenic in its nature, though not necessarily so. We treat it with opium, to which calomel may be added. The opium will check it without doubt, for a few nights; and as soon as this end is accomplished, the sedative should

be desisted from.

"The immediate pain of chordee may be warded off by local pressure of the hand, if the person is resolute enough to grasp the organ, and relax the spongy portion by curving it downwards. The application of cold is also an important resource.

"Sometimes the healthy progress of the case is interrupted, and an aggravation of the symp-

toms caused, by some act of imprudence on the part of the patient, of which inflammation of the neck of the bladder may be the result. Under these circumstances, the discharge often ceasing, we have frequent micturition from inability of the bladder to hold the urine for a longer period than a quarter, or half an hour; pain extends along the track of the urethra, and occupies the substance of the glans, accompanied by dysury, spasm of the urethra, and pain in the hypogastrium, the loins, and the mner and front part of the thighs; pain is also often referred to the rectum, and around the anus. All these symptoms are aggravated by exercise, and, in this state, patients are incapacitated for exertion of almost every kind.

"The treatment should be moderately antiphlogistic. Leeches, in number proportioned to the activity of the pain, and strength of the person, should be applied to the perineum. The horizontal position, and the frequent application of very hot flannels to the external organs and perineum, will afford considerable relief, after depletion; and a mixture of vinum colchici, sulphuric æther, and tincture of opium, in moderately large doses, will generally arrest the activity of the disease; and, as I said with respect to gonorrhæa in general, so I add in reference to this symptom—that as soon as you have broken the neck of the inflammation, deplete no more, but immediately substitute carbonate of ammonia in five-grain doses, or very small doses of copaiba or turpentine.

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"One great objection to excess of depletion in gonorrhoea, is the liability of the purulent discharge to degenerate into gleet as the inflammation subsides. This is a great evil, for its inconvenience and its obstinacy are almost proverbial. It is generally unattended with

pain, or, indeed, any other symptom.

"The secretion of true gleet is serous merely, combined with the mucus of the urethra; but it will vary according to the excitement to which the parts are subjected. It may be occasionally accompanied with slight pain in micturition, and during erection, and, of course, the more active the symptoms, the nearer the ap-

proach to the puriform character.

"There is obviously, therefore, no distinct boundary which points to the cessation of gonorrhœa, and its crisis in gleet; the change is gradual and imperceptible. If you treat a person habitually prone to large libations of drink, by entire desistance from his ordinary and necessary stimuli, he will have a protracted gleet; and this principle holds in all cases, cateris paribus, in which the depletion, whether positive or negative, has been needlessly persisted in: therefore the first consideration applies to constitutional treatment, which is, at least, equally important to local. I recently had a man under my care, who, when in health, took per diem about one gallon of porter, in addition to an occasional glass of gin. He had been the subject of gleet for ten months, for which he had employed the usual catalogue of

local remedies. I desired him to leave the gleet to take its own course, and resume his usual drink. He perfectly recovered in a week, and has had no return of the discharge. First, then, it appears necessary to raise the standard of the circulation and nervous power, by resuming ordinary diet and ordinary stimuli; and to this we may devote a week or ten days; during which I do not think you will find the local malady to advance, although it may feel the effects of the first increase. The general treatment often, I will not say, invariably adopted. seems objectionable, and chiefly because it fails in its object. It consists in the administration of large and still larger doses of internal stimuli; of which those in most frequent use, are turpentine, copaiba balsam, and cubebs pepper; and of local injections of alum, sulphates of zinc and copper, and nitrate of silver. The zinc is used in the proportion of from three to five grains to the ounce of water, and each of the other salts in similar proportions. On these failing, the strength is increased indefinitely, often extending to eight or ten grains to the ounce.

"The consequence of these remedies, both local and general, is that the vessels, weak and exhausted by depletion, are severely constricted, and reaction is the inevitable result, producing

a return of the malady.

"When a gleet has existed for a considerable time, it becomes, as it were, naturalized to the surface, and not unreasonably resents such violent measures employed to eject it; whereas

by gradually undermining its resources, by giving vigour to the vessels which supply it, and by wearing out its energies, by persevering but mild appeals to its forbearance, the vessels will gradually assume a healthier action, and the discharge will cease; and it is not often that this argument will fail. When a patient applies to you with gleet of long continuance, let him desist for a week from all treatment, local and general. Then, if his diet has been low, from the fear of aggravating the evil, enlarge it to the standard of his habits in health, and commence with an injection of sulphate of zinc, in the proportion of five grains to eight ounces of water. He will possibly reply—"Oh, sir, that will do me no good; I've used injections of ten times that strength, and they have failed." The answer obviously is, "They have failed because they possessed ten times that strength." But now, instead of injecting at night and morning only, you must desire him to employ the remedy sufficiently often to compensate for its weak-ness; and he should inject it warm every three hours. If it produce the slightest pain, lower the strength to four, or even three grains; but this rarely happens.

"At the same time you may order very small quantities of turpentine, &c., with an equal quanity of copaiba balsam. The immediate effect of these remedies is very slight; but, by repeating their application at short intervals, you confirm the advantage gained, small as it may be, while in the aggregate, you will have

obtained all you desire. Should these qualities fail, they may be slowly increased, but never to such an extent, as to lose sight of the principle on which they are recommended. I cannot say that I have much experience of the advantage of passing bougies in gleet, even when coupled with stricture. I do not think stricture is often a cause of gleet; at all events, that the gleet will subside on the removal of the cause, supposing it to exist in that relation to it. However, there is no harm in the introduction of a bougie, but I would not rely on it as an important resource. Change of air, and improved appetite, with its consequences, have cured, in a short period of time, many a case that resisted ordinary treatment, of which I could quote you many examples. There remains one subject on which I wish to say one word.

"Applications are frequently made, for the purpose of ascertaining at what period of the disease it ceases to be communicable. I recommend you to be most cautious how you commit yourselves on this head, by which, in cases of failure, you render yourselves morally responsible for whatever consequences may ensue. In truth, we know nothing about it. What is communicable to one person, is incommunicable to another; and so long as we have no certain evidence by which to draw the line, it is better to adopt the alternative of declining an opinion altogether, or of leaning to the side of good morals, by declaring that, so long as discharge exists, there is no exemption from the liability

to communicate it."

CHAPTER X.

ON THE SYMPTOMS AND TREATMENT OF THE VENE-REAL DISEASE, IN ITS LOCAL AND CONSTITUTION-AL FORMS; AND ON THE USE AND ABUSE OF MER-CURY—VENEROLA AND ITS CURE—INTERESTING CASES—MEANS OF PREVENTING SYPHILITIC IN-FECTION—CONCLUSION.

I have already observed, that animal poisons differ not merely in their intensity, but in their nature; that some confine their agency to the surface where the contaminating virus is originally applied; producing rather a peculiarity of disordered action than diseased change of structure; the constitution sympathizing little, and distant parts remaining unaffected. Such is the poison of clap; but the virus of syphilis or pox, produces local destruction of the surface, and from absorption, the whole mass of circulating blood becomes diseased. After an indefinite period, and even after the local sores have healed, the throat, the nose, the skin, the bones, become often successively implicated; and if neglected or maltreated, death may, and not unfrequently does, arise from its invasion. The local sores effecting the surface of the external genitals from impure intercourse, are denominated Chancres, sometimes single, occasionally more than two or even three are present. (See Plates.)

The time at which the effect of the poison producing these ulcerations makes its presence evident, is very uncertain. Generally speaking, the chancre makes its appearance three or four days after impure sexual contact; from five to twenty days forming the average period. An inflamed spot is first perceptible, presently, a minute pumple bursts, and displays a rapidly enlarging ulcerated surface. In the centre of the sore, an excavation is sometimes observable of considerable magnitude, extending beneath the skin, exquisitely sensitive and painful, erysipelatous redness surrounding the ulcer, and the skin assuming an unusual firmness. The edges of that sore are irregular, its form often oval, but hard and ragged, its surface yellow, and this feeling of solidity easily perceptible, if the part be grasped between two fingers. In fact, the thickened base is a distinguishing peculiarity of syphilitic sores. If a chancre have not penetrated the skin, it heals under the application of proper topical and internal treatment, but if once the skin be perforated by destructive ulceration; if the cellular tissue underneath partake of the diseased action, it becomes irritable, sloughs, or mortifies, and is attended with danger. When a syphilitic sore is confined to the surface of the skin, its progress is slow, and it is comparatively easy of cure; if, on the contrary, it burrows deeply into the integuments, the sloughing may be expected to be extensive, and the immediate constitutional and febrile symptoms will run

high.

Syphilitic sores or chancres vary exceedingly in character. This variety is not only produced by the previous mode of living, and the constitution of the patient, but is undoubtedly ascribable to diversities in the nature of the poison. If two persons differing in irritability absorb the same virus, the more irritable subject of the two will present a sore, surrounded by violent inflammation, so that a person labouring under simple sores to day, if he indulge to-morrow in any act of intemperance or debauchery, will change by that imprudence the aspect and tendency of the ulcer. In some unfortunate instances we have clap co-existent with chancre; however, the matter of gonorrhea will not produce chancre, nor will the secretion from a chancre originate clap, proving not the identity, but the diversity and the possible absorption of two poisons. Besides these, there are sores (believed to be followed by constitutional and se-condary symptoms,) produced by the contact of men whose constitutional condition is peculiar with women, whose genital organs secrete a simply irritating fluid; as the whites, the discased menstrual secretion, or indeed any impure secretion of a puriform character.

It happens not unfrequently, that males become infested with troublesome and suspicious sores from intercourse with women, whose purity is undoubted; nay, even from contact with their own wives at certain periods. These

views are fast gaining upon the confidence of the profession, and the result is most salutary, inasmuch as it was formerly the practice to style every sore without exception, syphilitic, to apply mercury indiscriminately; and, (to say nothing of the injurious and moral imputation) mercurial remedies unnecessarily and injudiciously applied, have frequently created a diseased condition mistaken for the undoubted effects of the syphilitic virus itself. Healthy women, in whom not a vestige of actual disease could be traced upon examination, and so pronounced healthy, have undoubtedly, in consequence of some diseased peculiarity totally unconnected with unchaste intercourse, communicated by aftercontact with their husbands or lovers, actual sores; closely resembling the previously recognized forms of venereal disease. These ulcers, which are perfectly simple in character, may be reasonably referred to the presence of matter, irritating the surface applied, and co-operating with a constitution, prone to the promotion of that peculiar form of local mischief.

Many authors favour the opinion that appears to be warranted by facts, that there exists not one poison of a specific venereal kind, but many. If the poisons that respectively produce clap and chancre be evidently distinct, forming two, who shall say that the limitation proceeds no farther; that each of these poisons is not attended by its own distinct results, not only as regards the character of the sore, but also of the secondary and constitutional symptoms? Those, on the

contrary, who hold the opinion that the whole train of venereal symptoms, both primary and secondary, are the product of the same poison, refer the diversities in the appearance of the sore to the modifying influence of health, temperament, and especially the habits of the patient.

It is exceedingly probable that if these animal poisons producing syphilitic sores, be not all identically the same, at least they are not very unlike, and may be considered as the different genera of one species, owing their differences chiefly to the peculiarity of constitution in which they are engendered; for it is certain that the poison of one sore in the female, will not invariably give rise to a series of corresponding sores, in each of those individuals of our own sex, with which she may have been placed in contact. It is tolerably well ascertained, too, that the sexual diseases which devastated Europe, about the period of the return of Columbus from the discovery of America, and which was supposed to have been brought hither by his sailors, are now, if not extinct, at least so altered, as to bear no relation to the horrible yet doubtlessly faithful relations of the historians of that period. Many of the French writers are decidedly of opinion, that infectious sexual diseases have been contemporary with the world's history, always prevalent in some form or other; and they suppose that an especial malignancy, (how generated, it is now impossible to say,) occurring in the fifteenth century, and

corresponding with similar exacerbation and decline in our own times, led the world to mark incorrectly as a new disease, that which, under some modification or other, had existed from

time immemorial-in all ages.

It was the opinion of Hunter, that gonorrhæa and chancre arise from the same specific virus, and his practice was conformable, and followed out (until the days of Cline, Cooper, and Abernethy) by the administration of MERCURY, equally for the cure of both diseases. But Hunter's authority is fast declining; the late Sir Astley Cooper, in reference to this distinction, was accustomed to observe, "let me say, no greater folly, nor indeed cruelty, can be committed, than that of giving mercury to patients labouring under Gonorrhaa. I abstain from entering the venereal wards of the other hospital, because patients under gonorrhea are compelled to undergo so infamous a system of treatment." Hunter spoke perhaps truly of a particular species of sore, but he generalized too much, identifying the "Hunterian chancre" with every other species of ulcer, resulting from venereal intercourse; hence his conclusions are much modified in modern practice. He taught us to believe, that it is the invariable character of all truly venereal sores to become progressively worse, and never undergo any amendment, unless Mercury, the specific remedy, be exhibited.

Thus, chancres on the penis and secondary sore throat, are described as constantly growing worse, without the aid of mercury. Now the fact is, there are many sores which become irritable and disposed to slough under the mercurial treatment; and ignorant surgeons mistaking the true nature of the case, have concluded that a more complete and speedy saturation of the system, alone could cure the mischief their own remedies were actually producing. If a sore were found to heal, as many will without Mercury, then, according to the Hunterian doctrines of the English school, it was declared not to have been venereal. Certainly, there is nothing in a name, whether ulceration aud destruction of parts be styled venereal, syphilitic, or simple, if originating in sexual contact; men do not, or ought not to prescribe for names, but for an actually existent condition. In doubtful cases I am advised to defer the employment of Mercury, for the purpose of judging of the nature of the disease by the foregoing criterion. But now it is well known that many rapidly-spreading dangerous sores, arising from sexual intercourse, are not only curable without the administration of a grain of Mercury, but are absolutely rendered malignant, by its ignorant and injudicious employment.

"As the non-mercurial treatment of primary sores gained ground, 'secondary symptoms' (or more correctly speaking, what were formerly mistaken as such,) diminished at the same rate. Many of these miscalled 'secondary symptoms,' have only lately been found out, in many cases, to be the primary symptoms of bad praetice. Yes, the rotten skulls which are to be found in ana-

tomical museums-with all the other beautiful specimens of diseased bones, which, in our younger days, were so abundant in hospitals, in the great majority of cases were the production of long and harassing courses of mercury. When the mercurial treatment was most in vogue, secondary symptoms were most numerous; but tho medical men of that day, the blind devotees of the doctrines of Hunter, supposed them to be the result of too little mercury having being employed in the primary treatment. These practitioners resembled the celebrated Sangrado, who, when his patients died, after he had drawn almost every drop of blood from their bodies, and drenched them with warm water while they were able to swallow it, declared their deaths could not have happened, if they had been sufficiently bled, or had taken warm water enough." I coincide entirely in the spirit of the above passage from the published lectures of Dr. Dickson, formerly a medical officer on the British staff, whose fearless mental independence in the exposure of popular and deeply-rooted medical fallacies, is deserving of the highest commendation.

The rash, indiscriminate, and unqualified abuse of mercury, has been productive of infinite mischief, not only in the hands of professedly educated surgeons, and ignorant quacks: but from them, the practice has descended to patients, who have thought to cure themselves. Under the notion of its being an antidote, the untutored think they have only to saturate the

system, or to persevere in the use of some one of those advised nostrums, the basis of which is often mercurial, though professedly vegetable and harmless; and so thousands are annually mercurialized out of existence, or their constitutions so broken, and the functions of the living system so impaired, as to render the residue of life miserable.

It must be recollected that at best, the peculiar condition which mercury produces upon the system, is in itself a diseased unnatural predicament. For with respect to the principle on which mercury acts, we suppose it cures true syphilis. not by any chemical operation, but by exciting in the constitution and parts affected, a particular action, to all intents and purposes the effects of a poison, yet not in sufficient dose to extinguish life, and that upon the principle or law of living organization, that no two widely differing morbific agencies can exist together, the syphilitic action is obliterated and put out. No considerations short of the absolute impossibility of averting its use, should reconcile us to the evil. There certainly are cases where a choice of evils presents itself, where mercury is appa-rently indispensable; but the selection of these cases, and the judicious administration of the remedy, both as respects the form of the preparation and its dose,-these are matters which require the most nice discrimination. als are among the edge-tools of physic, and require to be wielded by a competent and practised band.

True syphilis, then, is that disease, in which the chancre or primary ulcer on the genitals has a hardened edge and base; in which the blotches are scaly, with excavated ulcers in the throat; or when affections in the bones are complained of, those patients only are truly syphilitic, who have nightly pains in the shafts of the long bones, or decided enlargement of the bone. All other cases, although approaching in many of their characters to syphilis, are not to be considered as such, but as they generally proceed from sexual intercourse, the term "venereal" is still applied to them.

As to the treatment of the true syphilitic chancre,—even this is occasionally curable without mercury, but this does not warrant the assertion, that mercury ought not to be employed in the cure. Judiciously administered, this mine-

ral generally expedites that process.

From the foregoing description it appears, then, that venereal sores, or the swollen condition of the glands of the groin, termed Bubo, may occur without the general system being at all contaminated; but when the poison has been conveyed into the blood, unless proper remedies be applied, another order of parts inevitably become affected, namely, the skin, the tonsils, the nose, throat, inside of the mouth and tongue. When absorption of the syphilitic virus has taken place, ulceration of the throat is the earliest indication of the general disease, but the eruption in the skin is usually considered the first of the constitutional symptoms; this,

when truly syphilitic, is scaly, affording an excellent guide in the treatment, a circumstance by which it may be distinguished from those venereal eruptions which neither require nor bear mercury, which are either pimples, pustules, or elevated tubercles.

The mucous membrane of the nose, is liable to be affected by this disease, as well as the lining membrane of the throat. Ulceration in this part very speedily affects the bones, which become diseased, and are thrown off, the patient losing the natural prominence of the nose, as well as the acuteness of smell, and acquiring a most unpleasant peculiarity of tone in speaking. The bones often separate, long ofter the syphilitic action has ceased, and the treatment of this variety of disease is similar to its management when occurring in other parts of the body. Under proper treatment, no person perhaps lost his nose from syphilis, but the instances are very numerous in which this deformity has arisen from the abuse of mercury. Affections of the BONES in syphilis, (or after the primary symptoms have disappeared,) are often mistaken for Rheumatism. Pain in the bones is often the indication of syphilitic action, after not merely the healing of local sores, but even after ulceration in the throat and eruptive blotches upon the skin have entirely passed away; it would seem that there is an order of parts, mostly, but not always attacked in succession, of which the solid structure of the

bones, as well as their fibrous investment, ero

usually the last to suffer.

A most important feature in the history of syphilitic diseases, is the fact of their transmission from parent to offspring. Infants may be affected with syphilis in various ways. They may be diseased before birth, in consequence of the state of one or both of the parents. Dr. Burns, in his work on "Midwifery," observes, "that infection may happen when neither of the parents has at the time any venereal swelling or ulceration, and perhaps MANY YEARS after acure has been APPARENT-Ly effected. "I do not," he says, "pretend to explain here the theory of syphilis, but content myself with relating well-established facts." In such cases, it is very common for the mother to miscarry, or have a premature labour without evident cause; frequently the infant, born before the time, has been preceded by one or two dead children. It may be clean and apparently healthy, and continue so for even a month or two. but oftener it is feeble and emaciated, having a wrinkled countenance, the appearance of old age in miniature. Presently the eyes are inflamed, its cry is husky, low and murmuring, there is purulent discharge from the eylids, often, though not invariably, resulting from syphilitic contamination. Copper-coloured blotches, ending in ulceration, appear on the shrivelled skin, the nostrils become stuffed with a fætid discharge, the voice becomes hoarse or whistling, the throat becomes involved in the ulcerative process, if, indeed, as rarely happens, the child live long

enough to arrive at that state.

If the unconscious, helpless babe, receive the infection from its hired nurse, we discover ulcers on hernipples, and the disease appears on the child's mouth before the surface of the body is affected. Sometimes within twenty-four hours of their entrance into the world, such children have the palms of their hands, the soles of the feet, or the buttocks covered with copper-coloured eruptions, the nails at the same time beginning to peel off, and unless something be done for the little sufferers, they will quickly be carried off from the violence of the disease; indeed many children die of it, in consequence of the true nature of the complaint not being understood by the medical practitioner.

A case is recorded by Hunter, of a couple having been married for twelve years, during which time, neither party had been unfaithful to the other, nor were either diseased; the husband had had syphilis two years previously to his marriage, but considered himself cured.—About this time the lady bore him her fifth child; her two first children were healthy, but two following were feeble, and soon died; the lady was also in poor health. The last child was put out to nurse, and being itself afflicted with blotches resembling venereal, and having a sore mouth, the nurse became affected, both locally (on the nipples) and constitutionally, with a disease bearing every similitude to syphilis. Why this disease should lurk in the system for many

years, to develop its action on the child in the womb, or through what agency this connection is produced, we know not. That the association does exist, it would be futile to contradict: in fact, it frequently occurs that we can trace in infants a regular continuity of the action of this irritant poison from its parent; once having entered the system, and identified itself with the circulating fluids, it engenders a thousand fierce and contending symptoms, which may be indefinitely postponed; but, so long as a germ remains in the constitution, a renewal of its hostile action may be expected, and its half-extinguished energy again usurp its power with gradual and ter-

rible progress.

The necessity of attending to the first symptoms of venereal complaints has already been urged. The advantages of doing so are twofold. The necessity for taking quantities of loathsome medicine is avoided, from the probability of being able sooner to cure the disease.-By taking it thus timely, also, many of the more formidable symptoms may be averted altogether, and the constitution spared that debility which is the inevitable attendant upon protracted syphilis. There is oftentimes, unluckily, great apathy and indifference in young men, who suffer under any of the aforenamed diseases. It is no uncommon acknowledgement, to hear that a patient has a clap or a gleet for a year, or even years; and the reason he gives why he has endured it so long, is, that the attempts at cure have been so multifarious and futile, or that he has become tired of taking medicine, and that he had determined allowing it to pursue its own course. The probability is, that he lacked resolution and perseverance in following the advice steadily of any one medical man, and that he has run the gauntlet of half the profession, and had not lost much time in seeking advice from those out of it. The same remarks are applicable to the afflicted with stricture or syphilys. The former complaint generally is of many years' duration, before an attempt is made to get rid of it; and in the latter instance, the healing of a chancre or the subsidence of a bubo, lulls the owner into false security, and after the lapse of several years, secondary symptoms have been known to shew themselves, thereby involving the necessity of going over the same ground of treatment again. These occurrences certainly mostly happen, where the parties have been moving from place to place, and their cases have not had that attention they demanded, or else in those instances where they have been unskilfully treated throughout. Nor are these facts mentioned to create unnecessary alarm; they are simply stated, and the reader with common reflection can admit or deny their plausibility.

Let not false delicacy induce the sufferer to hazard the dangerous experiment of the management of his own case. Without any knowledge of the modifications which individual temperament produces upon the character of disease, without an intimate acquaintance with the nature of disease, rather than with the mere history of

symptoms—ignorant of the precise operation of powerful remedies, for such an one to turn these potent engines of good or of evil upon himself, is a species of weakness truly pitiable. Attempts at self-cure are too frequently finished in self-destruction. It has been said, (and not without truth) that in the practice of the law, he who conducts his own case, has a fool for his client; and much more emphatically may the assertion painfully apply to those, who turn in weakness and suffering, their ill-judged remedies against themselves. The practitioners of the healing art are generally wiser, and silently teach the unprofessional world an important lesson, in refusing to prescribe for themselves, however trivial or temporary may be their ailment.

With these cautions, we append the following remarks on the treatment of venerola or pox, by

Mr. Skey :-

"The treatment of venerola is most simple.—
The sore requires cleanliness, protection from violence, and moderate attention to the general functions of the system during the ulcerative stage. The local applications should be mild and unstimulating. Common spermaceti dressing is the best. If the sore be within the prepuce, linen may be substituted for lint, that its pressure may not cause irritation. It should be changed about three times in twenty-four hours, the sore being as frequently washed with warm water. All stimulating applications, whether black wash, zinc, copper, or other descriptions of ointment, should be carefully eschewed, being

not merely unnecessary, but positively objectionable. Mr. Evans recommends the application of a weak solution of acetate of lead, and poultices, to sores on the outside of the penis or scrotum; in the latter recommendation I fully concur, inasmuch as a poultice is a soft, moist, and innocuous remedy, which protects the sore from external injury or violence. Should the granulations in the later stage rise considerably above the surrounding level, they may be reduced by the application of sulphate of copper, or of a solution of five grains of nitrate of silver to an ounce of water; but either of these remedies should be resorted to in the latter stage only, and applied with care, their application being made as lightly as possible. The constitutional treatment is also abstinent. A mild aperient, followed by small inoffensive doses of antimony, if the sore be attended by heat of the skin and constipated bowels, is all, or nearly all, that is required. If unattended by these infrequent concomitants, I have been in the habit, for some years past, of treating such cases with bread-pill night and morning, and I am acquainted with no form of medicine which, as applied to the case before us, is both more efficient and less objectionable.

"Some years since I was in consultation with an eminent surgeon on a case of venerola occurring in a hospital patient, to which my attention was directed, which he considered an example of the true Hunterian chancre. I smiled on seeing the "true Hunterian," and merely said, in the absence

of the man, that I would, as a joke, lay him a wager, that I would tell him within a few days how long the sore had existed, at what length of time it appeared after connexion; and, moreover, that I would undertake to cure the disease without the use of any description of medicine whatever; pledging myself, too, that no secondary eruption of any kind should follow the healing of the sore. All this I performed to the letter; and this feat, great as it may appear, requires no knowledge that a little common observation may not afford, in a comparatively short period of time.

"This form of venereal sore requires watching, more especially in some deprayed states of health; but you must be content to be a quiet inofficious looker-on—probably for weeks. You cannot arrest the ulcerative action by stimulants, nor can this object be effected by the agency of mercury. Whatever be the change effected by tampering with the sore in the ulcerative stage, must be superadded to the allotted time for its

cure.

"But the progress of the sore may be entirely arrested by escharotics, provided they be applied early in the ulcerative stage. This plan of treatment was adopted and recommended by Mr. Wallace of Dublin, who resorted to it very generally, as the means of destroying a surface which seems to have the power of contaminating for a limited period contignous parts. It is obvious, therefore, that it is applicable only to the first stage of ulceration; in which, if at all, it must be applied freely. Mr. W. employs the

nitrate of silver, which should be rubbed carefully on every part of the ulcerated surface.

"Instead of the nitrate of silver, I prefer nitric acid diluted with an equal quantity of water, which has this advantage, that being applied to a small surface, it diffuses itself immediately over This practice is applicable only to a small or early sore, and not to one advanced; for if resorted to in an advanced stage of ulceration, it will often prolong the evil it is intended to arrest. It is a form of treatment which may be resorted to in cases of emergency, where time is especially valuable. For example-a gentleman is leaving town on an excursion of pleasure, which it is impossible to postpone; or he may be engaged to be married on a particular day for these are emergencies with which we have occasionally to contend. Here we may resort to this more direct line of cure, which is rarely followed by evil consequences, provided, as I have before stated, the ulcerative stage be not advanced.

"As a general rule, there is no necessity for the administration of mercury, in any form or quantity. At the same time you need not forswear its use. In moderate quantities, it is inoffensive and unobjectionable, and may often contribute to the healthy progress of the sore. Five grains of blue pill to an ordinary patient, not the subject of mercurial idiosyncracy, may accelerate the cure, when given each, or alternate nights; but it should not be used continuously for more than a few days. There is

no advantage in what is called "touching the gums;" but generally a great disadvantage both

to the sore, and to the health.

"That the common venereal sore will heal under the administration of mercury, none can doubt, whose attention has been directed to variety of treatment : much will, however, depend on the quantity employed. Undoubtedly a change is effected, which is more or less marked, in proportion to the quantity, and to the susceptibility of the constitution to its prejudi-

cial influence.

"Moderate quantities of mercury produce immediately on the sore no perceptible effect, nor would they on a sore situated on any other region of the body. In larger quantities, the progress of the sore is retarded, and its healing process will be protracted, while under salivating doses the ulcer assumes a dry, glassy, and unhealthy aspect, and will often remain stationary for weeks, or even months, without progressing in the smallest degree towards the stage of cicatrization; while occasionally, under mercurial action, it will even extend. This, at least, is the result of my observation. I have seen, in the practice of others, many hundred, I believe I might safely say thousand cases, so treated, and I can truly declare, that between the two forms of treatment there is, as far I can judge, no comparison in respect of rapidity or safety. I have seen examples of venerola rendered stationary during three and four months by mercurial treatment; and one man I recollect to have been severely salivated no less than three several times for this simple form of sore, the effect of which was to convert a simple into a chronic ulcer of the penis, monstrous in size, ungratulating, and with highly elevated edges; for this symptom will become even more and more apparent, as the disease becomes chronic.

"We must not suppose that we fail of advantage from the administration of mercury, if we employ it in doses which exhibit no effect on the gums, or on salivary glands. Indeed I cordially occur in opinion with M. Ricard, who asserts, that under no circumstances, as an antivenereal agent, ought mercury to be employed to this degree. But in the treatment of those forms of venerola in which irritating local treatment has produced thickening around the sore, or in which such thickening has arisen from any other cause, local or constitutional, then mercury becomes an important agent in the treatment, but should be given with great moderation. Five grains of the compound chloride pill, or of the blue pill, may be given every night, or night and morning, for four or five days or more, to be determined not by its influence on the mouth or gums, nor even on the sore, but by its influence on the thickening around it. When the thickening diminishes, the mercury, which, it should be recollected, has not been employed with a view to the destruction of a poison, but for the simpler object of obtaining absorption of lymph merely, may be immediately suspended."

CASES.

"At the period I am writing, I have under my care about twenty-five venereal cases among the out-patients of St. Bartholomew's Hospital, of which ten are examples of the simple sore. In none of these, have I had occasion to order any medicine whatever, beyond an occasional aperient. I order these patients camphor mixture, or bread pill, twice or thrice a-day, and desire them to keep the sores clean, washing them night and morning, and applying to the surface a small piece of spermaceti dressing. In the latter stages, I employ sulphate of copper, lotions of sulphate of zinc or black wash; and although rigorously enjoined to return, should secondary disease manifest itself, I have, during the last five years, seen no one undoubted example of eruption consequent on the simple sore.

"The sores represented in plate 1, Fig. 1, were taken from a man who presented himself as an out-patient at St. Bartholomew's Hospital: they had existed about a month, as nearly as he could recollect, when he applied for advice at the hospital. On referring to his letter, I find that on the 13th of June I ordered him camphor mixture. On July 4th, his sores had healed. I made no change in his treatment. Within a few days of their entire cicatrization, some condylomata appeared on his scrotum, and subsequently others appeared around the

orifice of the anus. These I treated with dry lint, simple dressing and black wash, and they were cured in about three weeks from the date of their first appearance.

"The following is a case of not very uncommon occurrence, in which the progress of the sore was entirely suspended by mercurial ac-

tion.

"Philip Roberts, a porter, was sent to me by a medical friend, in the summer of last year, 1839, with a sore on the body of the penis, of the size of a shilling, irregular in form, flat on the surface, and with a considerably elevated edge. The colour was whitish, and, like unhealthy lymph, indicating a thoroughly chronic action. It occasioned him no pain, and was attended by no sign of inflammation. His health was not materially impaired by the treatment. He had had the sore during the five previous months, and had been the subject of three distinct salivations, under each of which the sore had extended in size. Every variety of local application had been exhausted in his favour, under the forms of mercurial and stimulant. In short, no expense had been spared by his master, for he was a valuable servant, and no trouble by his medical attendant.

"For one month I watched his case every second or third morning; and with the exception of a little simple dressing, and a poultice at night to protect the sore, I ordered him absolutely nothing, beyond a moderate quantity of porter daily with his dinner. At the expira-

tion of a month, the sore assumed a healthier aspect; red granulations formed, and at the end of two months the sore had healed."

The frequency of venereal complaints is much greater than the public imagines, though much diminished of late years. It is, however, a fact, which cannot be disputed, that in large cities there is not, perhaps, one in ten male individuals, from the age of twenty to thirty years, who has not been affected once or twice with gonorrhæa or syphilis. I have been often shocked on seeing boys and girls at the age of puberty presenting themselves with syphilis or gonorrhæa at the hospitals which lattend. Here we daily observe every form of venereal infection, and the most frightful inroads upon health and social happiness.

These diseases are very common in private practice, and lead to the most distressing results. They are often concealed from the family medical attendant, and the sufferer applies for advice to advertising empirics, who generally allow disease to destroy or contaminate the constitution. It must be obvious, that proper advice should be had as soon as possible, and medicine taken on the first appearance of dis-

ease

Transmission of the Venereal Viruses.—The venereal viruses, or of syphilis and gonorrhea, are transmitted by absorption or inoculation, which occurs more or less rapidly in different persons; in some in a few hours, in others not for some days, and in a few not at all.

Hence ablution, or washing the parts, as soon after exposure to the poison as possible, will often prevent infection. But the disease may also be communicated by impure kisses, suck-ling, infected parents, absorption in the skin, excesses in sexual enjoyment, and even the consummation of marriage. The direct application of a chancre, or a primary venereal sore, to any part of the body, if the skin be broken, and especially to a mucous surface, such as the lip, the eye, the nostril, or any of the outlets of the body, to the nipple, or to any part where the surface is tender or broken, will communicate the disease. But excoriations of the glans penis, prepuce, and labia, are easily distinguished from chancres, and are merely local affections which cannot contaminate the constitution, though non-medical individuals entertain the opposite opinion.

Prevention of Syphilitic Infection.—The best mode of preventing infection is immediate ablution with water and soap, or a dilute solution of the disinfecting agents, such as the chloride of lime or soda. But when a pimple or sore has once formed, absorption or inoculation has taken place to some extent, and the disease cannot be

removed by ablution.

There are certain means used by libertines which prevent venereal infection and procreation, and I regret to state, these have lately been minutely described in a modern medical periodical in this country.

As soon as a pimple or little blister has form-

ed after an impure connexion, on any part of the genitals, it ought to be carefully touched with nitrate of silver, the diseased part destroyed, the remaining ulcer dressed with mercurial ointment, and washed with the mercurial lotion, called "black wash," to insure a successful and certain cure. The patient should also take mercury until the teeth become painful on pressing them against each other, and until the gums become tender. Sarsaparilla properly prepared, nitric acid, and hydriodate of potass, ought likewise to be exhibited at the same time.

Secondary Symptoms.—When venereal ulcers or eruptions appear, after any primary sore, on any part of the body, as on the face, throat, chest, back, thighs, &c the constitution is in feeted, and a judicious use of mercury, compound calomel pill, sarsaparilla, nitric acid, hy driodate of potass, and other appropriate means,

are indispensably necessary.

It is very important to distinguish the pseudosyphilitic from the real disease, which is easily done by studying the description of Abernethy and others. There can be no difficulty in diagnosticating imaginary venereal affections of nervous or timid persons, and of those about

the age of puberty.

Syphilitic neuralgæ, or severe pains in the head, face, or other parts of the body, as well as rheumatism, require the use of mercury and the other remedies already mentioned, with strong anodyne embrocations, and the internal use of the sedative preparations of opium, mor-

phia, or the extract of hyoscyamus and conium, colchicum, veratria, &c.

A gentleman, aged thirty-six years, of scrofulous habit, requested my advice under the following circumstances. He stated that he had not slept for six weeks, in consequence of severe pain in the bones of his head, arms, and insteps, which became intense in the evening, and occasionally at different hours of the day. There were several blotches on his face, which greatly disfigured him, and a copper coloured eruption on his chest and body. There was a painful swelling on the back of the left hand and right instep. He stated that he had been under the care of two of our most distinguished surgeons, who gave him large doses of mercury without affecting him, and who had advised him to take sarsaparilla, which he continued until he had expended a large sum in the purchase of it. The appetite was bad, the spirits greatly dejected, and the general health very much injured. His condition was rendered still more distressing, as he had lately married, having been previously assured that he was free from his disease.

I ordered him scruple doses of calomel combined with camphor and morphia, the hydriodate of potass, and an ointment of the latter, to be applied to the painful tumours on the hand and instep, with a full dose of morphia every night at bed time. The painful parts were also rubbed with camphorated oil and morphia, twice a day. He felt greatly relieved from his

neuralgic pains the first night, his mouth was affected with the mercury on the ninth day, after which all his symptoms rapidly disappeared, and in six weeks he looked much better than he had done for many years previously. He has since enjoyed health, and is now a happy husband and father.

Many practitioners are fearful of such doses of mercury, but those who have practised in tropical climates, more particularly Dr. James Johnson, assures us of their perfect safety. I have now employed them for some years past, without the slightest bad result, when combined as above advised, and after ordinary doses had failed.

A similar case, deserves record :-

A merchant, aged 50, who had been improperly treated for syphilis, seven years before his application to me, complained of severe pain occasionally in the middle of the left shin bone, which became so excruciating at times as to deprive him of sleep for several nights. There was no redness or swelling of the painful part. He had been salivated ten times by one of our most eminent surgeons without relief; and he, as first suggested by Sir Philip Crampton, Surgeon General in Ireland, proposed to lay the part open, to which the patient would not consent. I ordered him the hydriodate of potass in combination with the acetate of morphia, and an ointment of the ioduret of lead, with morphia, to be applied night and morning to the affected part. He continued this plan for a fortnight,



Fig. 1.



Fig. 2



when he was free from pain, and in a month he considered himself cured. It is now nearly three years since his recovery, and he has had no return of his disease. His sufferings were so great at one time, that fears were entertained by his relations that he might commit suicide. He had been treated by an ignorant chemist, when first affected.

Both these patients had nodes, as well as most severe neuralgia, or tic doloureux; and I may also confidently state, that the treatment employed will often afford relief even in venereal exostosis or enlargement of the different bones.

Venercal Eruptions.—Every form of eruption in the skin may be stimulated by venereal disease, as first accurately described by Mr. Carmichael, of Dublin, and subsequently, most accurately delineated by M. Rayer, in his splendid work on Diseases of the Skin. Some of these produce the greatest deformity of the face, nose, and even destroy the soft parts, as the palate, genital organs, &c., and different parts of the body; they require the use of mercury, sarsaparilla, iodate of potass, &c.

Alopecia or Baldness is also caused by syphi-

lis, and is an incurable disease.

Osteocope, or intense pain in the bones, may also be induced by venereal disease; and it is often accompanied by severe headache. The treatment is the same as in the last form of the disease.

Excrescences and Ulcerations of the genitals, about the anus and adjacent parts, and even

sloughing, must be included in the effects of this

horrible complaint.

In this work I have confined myself to an enumeration of those maladies which impede the genital function, and prevent the procreation of the species. I now submit these pages, the result of many years' study, reflection, and observation, to an enlightened public, impressed with the conviction that they are calculated to correct much error, and with the hope of benefiting succeeding generations.

THE END.

Fig. 3.



Fig. A.





Fig. 6.



Fig. 5.



